# **Chronology Papers**

**Chronology of Mankind and Its Quandary** 

Volume 5 of the BeComingOne Papers

by

Walter R. Dolen

## Copyright © 1989, 1995, 2001 by Walter R. Dolen Revised in 2006 This edition supercedes all previous editions

Portions of the *Chronology Papers* were first published in 1977 under the title:

The Becoming-One Papers

This work is a corrected and enlarged version of the 1977, 1989, and 1995 work.

The *Chronology Papers* is part of the *BeComingOne Papers*1993 Cumulative Edition
and subsequent editions

Printed in the United States of America Last Printed July 2006

ISBN 1-877981-397

**BeComingOne Publications** 

http://becomingone.org/pub

## **CP: Table of Contents**

Chron	iology Papers
	CP1: Biblical Chronology CP1:1
	CP2: Secular Chronology
	CP3: Methods, Calendars, Absolute Dates, Chaos, and other Details
	CP3:1
	CP4: Chronology and Christ
Index	Page 191
Expan	ded Table of Contents Page 201

## Acknowledgment

I wish to thank and acknowledge my God and creator, who gave life, who answered my prayer for knowledge, who gave me strength, and who will be merciful to all his creation. Second, I thank and acknowledge my wife Shirley Clare for standing by my side while others didn't, who bore my children and helped raised them, who edited my papers, who had patience when I spent our money and ten of thousands of hours on my study, and gave me encouragement when times were difficult. Third, I thank all Christians who came before me for their work and dedication, for without them (and the Spirit) we would not have Christianity. Fourth, I thank all scholars of God's word, who wrote Biblical helps (concordances, interlinear Bibles, grammars, computer programs, creation v. evolution works, etc.) and critiques of Christian doctrine, for they made my work easier. Fifth, I thank all scholars of serious works (philosophy, science, etc) for their work for no one person can think through all opinions pertaining to the truth: we need to compare our knowledge with others in order to ascertain the real truth. Lastly, I thank all who gave me constructive criticism.

Walter R. Dolen April, 2001

### Documentation

When you see, "The God, all in all" (1 Cor 15:28), it means that this is a quote from the New Testament letter called First Corinthians, chapter 15, verse 28. If you see "2 Cor" it would mean the *second* letter of the Corinthians. If you see "2 Cor 11:4" it would mean we quoted from the second letter of the Corinthians, the 11th chapter, and the 4th verse. But sometimes you will see a documentation such as "(1 Pet 2:4)" after a sentence that has no quotes. This kind of documentation is used in order to *support* the previous sentence or sentences, or to *point out other similar or related views* of the previous sentence or sentences.

When you see reference to "PR7" it means more information can be found in *Prophecy Papers*, Part 7. When you see "GP2" this means more information can be found in the *God Papers*, part 2.

BP = Beginning Papers

NM = New Mind Papers

 $GP = God\ Papers$ 

PR = Prophecy Papers

CP = Chronology Papers

cf or cf. = confer or compare

p. or pp. = page or pages

w/ = with

"Jerusalem will be trampled on by the Gentiles until the times of the Gentiles are fulfilled." (Luke 21:24)

## **CP1: Biblical Chronology**

Earth is Old Earth is Young

## Chronology of Mankind and Its Quandary

cp1» Due to egocentricity, mindsets, poor scholarship, lost records, burnt libraries, war and other reasons, the chronology of mankind is not a simple matter. Not at all. We have chosen to use the Bible as the foundational material for our chronology in the *Chronology Papers* and we start our chronology with the Creation by God in the first year of man (YM). That is, in the first year that mankind existed we begin the chronology of the history of man. Some say the Bible was not meant to be used to ascertain the chronology of mankind. They speak of gaps in the Biblical chronology. But although the Bible's purpose is not primarily for chronology it does have a chronology built into it. There is a line of chronology that runs through the Bible. The lack of detail in some biblical accounts will make it difficult to have a correct biblical chronology, but not impossible.

cp2» The chronology of the *Chronology Papers* is a Biblical chronology based primarily on scripture and secondarily on secular sources. We use the Bible as our main source of study because the Bible contains a chronology of about 4000 years and because the Bible has proven more trustworthy than secular sources ("Bible Paper" [BP2]). The Bible is full of old customs and an amazing amount of detail. It names cities, places, kings, nations, laws, and even dates, lots of dates. Myths do not contain vast amounts of detail. Many of the Biblical details have been confirmed in the last 150 years by archeology (see *Archaeology and the Old Testament*, by Merrill F. Unger; etc.). In the *Chronology Papers* we show that the dates of the Bible are the best source for evidence to help establish the chronology of mankind.

cp3» Contrariwise, we distrust secular sources for chronological evidence mainly because secular sources are dubious and fragmented, and

because in the past there was no universal dating system: there was no universal calendar (see CP2 & CP3). Each country, even each city, had their own calendar. Concerning the ancient Greek cities:

The tenth day of the month for the Corinthians is the fifth for the Athenians, and the eighth somewhere else....the beginning and the end of months in various Greek cities did not coincide....The battle of Plataea (479 BC) took place on 27 Panamos according to the Boeotian calendar, but on 4 Boedromion according to the Athenian calendar; at that time the beginning of the Athenian month came seven days later than the Boeotian...It happened, rarely, that two cities agreed to begin the months on the same day...Each *polis* had its own mode of time reckoning as it had its own month names and numerals... (pp. 32-33, *Chronology of the Ancient World*, Bickerman; in chap. 3 of *Greek and Roman Chronology*, Alan Samuel details 96 Greek calendars).

cp4» This makes it extremely difficult to interpret past secular dates. Today we use the universal dating system called the *Christian Era* system (BC-AD). From this system we can actually compare events in different parts of the earth by their chronological order. But this was not the case in the past. In the *Chronology Papers* we have connected Biblical dates with the *Christian Era* system (BC-AD). We use "absolute dates" to do this, that are based on many astronomical phenomena, not just one vague eclipse. Contrary to what many think, there are few *absolute dates* before Christ's time. Chronological schemes based on so-called "absolute dates" using only eclipses are making a major mistake. Herein we identify a few real absolute dates and show the fatal flaw in using just one eclipse to identify ancient dates (see CP2 & 3).

## **Two Views of History**

**cp5»** There are two general views of history that are polarized. One is that the cosmos is old, very old, billions of years old. The other view is that the cosmos is young, very young, only thousands of years old.

## **Earth is Old Theory**

cp6» Those who believe that the earth is billions of years old have various theories to "prove" that the earth is billions of years old. They speak of the Uranium to Lead method of dating, or the Thorium to Lead method of dating. They speak of bones that they say are millions of years old. When you are educated in an environment that dogmatically indicates that the earth is billions of years old it is ludicrous to believe that the earth is

only thousands of years old. To believe that the earth is thousands of years old is to be uneducated or ignorant, and you are ripe for belittling by the "educated." But every belief system has it foundations. The "earth is old" system of belief is related to the "evolutionary" system of belief. Those who believe in evolution *must* have an old earth. The magic of evolution needs billions of years of "natural selection" in order to work its miracles. But all methods of dating events and materials billions, or even millions of years old, are baseless, illusionary, and arbitrary.

## Foundations for the "Earth Is Old System"

#### Theory of Evolution

cp7» (1) The theory of evolution is the first foundation for the "earth is old" theory. Evolution needs an old earth for its development. There are numerous works that examine the theory of evolution (see list in Beginning Papers). Because the theory of evolution needs an old earth, it found an old earth through selective perception. Any method that indicates a great age is an acceptable method for evolutionists. Any method that indicates a young earth is a rejectable method for evolutionists. Evolutionists don't even feel a need to examine other points of view. Their minds are made up. They have a mindset. Their selective perception reaffirms to them each day that evolution is correct. Thus, any method that proves an old earth is correct; any method that proves the contrary is foolishness.

## **Radioactive Dating Methods**

cp8» (2) The radioactive dating method is the second foundation for the "earth is old" theory. All radioactive dating methods start with a parent element which through radioactive decay turns into a daughter element. The decay rate is measured in half lives. The half life of Uranium 238 is said to be about 4.5 billion years. A unit of Uranium 238 turns into ½ lead and ½ Uranium after about 4.5 billion years. The Uranium 238 is the parent element and Lead 206 is the end or final daughter element. There are other daughter elements between Uranium 238 and Lead 206. For example, Uranium 238 first decays into the daughter element Thorium 234 after about 4.5 billion years, and then after about 25 days turns into Protactinium 234, then after 1 minute turns into Uranium 234, then after 300,000 years turns into Thorium 230, then after 80,000 years turns into Radium 226, then after 1600 years turns into Radon 222, then after 4 days turns into Polonium 218, and continues its decay until it reaches Lead 206 (Krauskopf and Beiser,

Fundamentals of Physical Science, 5th Ed., p. 252, see p. 562).

cp9» If the rate of decay is constant, then we have a clock in which to tell time, if, and only if, we know the ratio of Uranium 238 in the earth compared to Lead when the earth was formed/created, either by God or by the magical evolution. Because the decay rate of Uranium 238 is so slow compared to the decay rates of other elements in the series only the amount of the end daughter, Lead 206, is considered when ascertaining the age of the rock. The earth is believed to be about 5 billion years old according to evolutionists. But, of course, 5 billion years ago there was no man to observe the ratio of Uranium in the rocks compared to Lead. It is nothing but guesswork and nothing else when someone arbitrarily says that at the beginning there was such and such ratio of Uranium as compared to Lead. Guesswork is not scientific work.

#### **Constant Decay Rates?**

**cp10**» Furthermore it was believed at first that these decay rates were constant.

"Radioactivity was discovered by Becquerel in 1896. In 1906, Millikan stated, 'Radioactivity has been found to be independent of all physical as well as chemical conditions. The lowest cold or greatest heat does not appear to affect it in the least. Radioactivity seems to be as unalterable a property of the atoms of radioactive substances, as is weight itself.' This state of mind established the modern view, which is quite generally held today.... The electroscope and spinthrascope were used in early study of radioactive alpha-decay rates. The inherent limitations of these early instruments led to erroneous conclusions:

- That radioactive decay rates are constant.
- That these rates cannot be altered by change of the energy state of the electrons orbiting the nucleus.
- That radioactivity results from processes which involve only the atomic nucleus.

Refinements in electronics resulted in the development of sophisticated counting apparatus. The equipment was used in the demonstration by several investigators (1949-73) of rather easily induced changes in the disintegration rates of 14 radionuclides, including <sup>14</sup>C, <sup>60</sup>Co, and <sup>137</sup>Cs. The observed variations in the decay rates, (changes in the half life) were produced by changes in pressure, temperature, chemical state, electric potential stress of monomolecular layers, etc. ... The decay 'constant' is now

**considered to be a variable.**" [H.C. Dudley, *The Morality of Nuclear Planning*, 1976, p. 52ff; my emphasis; see G. T. Emery, "Perturbations of Nuclear Decay Rates," *Ann. Review Nucl. Science*, vol. 22, (1972), p. 165; and see H.C. Dudley, "Radioactivity Re-Examined," *Chemical and Engineering News*, April 7, 1975, p. 2.]

**cp11»** Even a small amount of variation in the decay rate can make a big difference in the assumed age of the rock:

"Measurement of nuclear disintegration parameters has been done for about fifty years. To my knowledge no major research effort has been mounted to determine whether nuclear decay parameters vary at all with time [he is speaking of time not pressure, chemical state, etc]. Once values of the decay index for a particular nuclide are obtained and a particular value is agreed upon, this value is generally accepted. Usually no further measurements are taken....

If a small amount of exponential variation occurs in the nuclear decay index, then the half lives of the radiometric nuclides are drastically reduced — orders of magnitude. In the case of U 238 the half life is reduced by a factor of 10<sup>5</sup>" (Theodore W. Rybka, *ICR Impact Series* No. 106)

#### Decay Rates not Constant; Atomic Clocks not Constant

cp12» As we see above temperature, pressure, chemical state, and other factors do change the decay rate of radioactive elements, and this drastically changes the so-called clock of radioactivity. Atomic clocks even seem to change their rates of decay by the direction in which they travel in an airplane. Those going westward gained time; those going eastward lost time (Hafele, Keating, 1972, "Around-the-world atomic clocks," *Science* 177 [4044]). Diurnal variation, or daily variation (shortly after sunrise), of atomic clocks have been observed (D. S. Sader and B. D. Au, Nature, 224, 291, 1969).

#### Radiohalos

cp13» Robert V. Gentry's work on radiohalos has cast a shadow on the premise that the decay rates are constant. "Radiohalos" are microscopic, ring-like discolorations caused by radioactivity in certain minerals. Early work seemed to indicate that the radiohalos exhibited dimensions predictable on the basis of modern decay rates. But Gentry who worked at the Chemistry Division of the Oak Ridge National Laboratory in the 1960's "set out to review previous work on the subject, then began his own painstaking study of thousands of halos in rocks from around the world.

Almost immediately he found that all was not in order in this long neglected field. Gentry discovered that, although uranium halos, for example, are readily identifiable by the number and relative rough diameters of their rings, their actual dimensions often vary substantially, even within a single crystal" (Ralph E. Juergens, "Radiohalos and Earth History," *Kronos*, III:1, pp 7 ff; read article, and Gentry's articles noted in footnotes). Gentry has shown that the "halos furnish no proof that [the decay constant] is constant" (Gentry, *Science*, April 5, 1974, pp 62-66; Also see Don B. De Young, "The Precision of Nuclear Decay Rates," CRSQ, Vol. 13, No 1 [1976]; and John Lynde Anderson and George W. Spangler, "Radiometric Dating: Is the 'Decay Constant' Constant?," *Pensee*, Vol 4 No. 4 [1974]; *Scientific Creationism*, 2nd Ed., 1985, Chapter VI; and other works.).

#### **Dubious Premises**

cp14» Evolutionists use the elements with the slowest rates of decay to measure the age of the earth, and they use the highest ratio of the parent element to daughter element at the time of formation/creation in order to give a high age. Remember there were no human observations made at formation/creation to help establish the correct ratio. The ratio may have been low. Thus, even if the Uranium-Lead method is correct, the earth is still young since there was a low ratio at first.

## **Different Methods of Dating Don't Agree**

cp15» There is also the problem of variation of the ages arrived at by using various elements and methods to date the earth. One system of dating gives one date, another gives a contradictory date. Or one set of rocks gives one age, while another set of rocks gives a different age for the earth. What does the believer in the "earth is old" theory do? With the Carbon 14 dating method (C14) they merely pick the result they wanted to begin with, "If a C14 date supports our theories, we put it in the main text. If it does not entirely contradict them, we put it in a footnote. And if it is completely 'out of date,' we just drop it" (T. Save-Soderbergh, "Carbon 14 and Egyptian Chronology," Nobel Symposium 12 Radiocarbon Variations and Absolute Chronology, Stockholm, Almquist and Wikwell, p. 35; quotes from R.D. Long, CRSQ, Vol 10, No 1, p. 19; Science, Scripture, and the Yound Earth, 1989 Edition, pp.42ff). This is the way some quote the Bible. If a verse agrees with a belief it is quoted, if not it is ignored. And this is like the "identification game" used in astronomical retro-calculations (see CP2).

## **Great Age and Distances in Space Based on the Redshift Method**

## Redshift "Foundation"

cp16» (3) Great distances in space is the third foundation for the "earth is old" theory. The "earth is old" group believes in such things as the "bigbang" theory, where the universe is expanding, if we interpret the wavelength shifts (redshift) as velocities. Alternatively, there is the pulsating universe theory: The universe is now expanding (based still on the redshift theory), but eventually the expansion will cease and contraction will set in. No age can be ascertained from this theory. Thus the evolutionists use the big-bang theory to age the universe. All matter came from a big explosion and has been spreading out ever since. Since the earth to them is billions of years old, then the matter in the universe has been traveling after the explosion for billions of years. Matter has spread out great distances since the beginning. Magically they have found methods that "prove" great distances in space. They use the red-shift method for dating the universe, for the proof of galaxies (formerly called "white nebulae"), and for the great distances between stars and other objects in space. But others have shown the very shaky foundation of this red-shift method (See Science Papers; Field, Arp, and Bahcall, Red-Shift Controversy, 1973; Herbert Dingle, Science at the Crossroads, 1972; Halton Arp, Seeing Red: Redshifts, Cosmology and Academic Science, Apeiron, Montreal, 1998; etc.).

#### cp17» Quotes:

- The essence of the Big Bang cosmology is an expanding universe. The redshift of light from galaxies is proportional to their distance (as inferred from brightness). No cause of galaxy redshift other than a velocity away from the observer was considered plausible, so Hubble's result was taken to mean that the farther away from us a galaxy is, the faster it moves away from us. Hence, the overall universe had to be expanding. Of course, the redshift still might be caused by something other than velocity. (Tom Van Flandern, *Dark Matter, Missing Planets & New Comets*, 1998, p. 390)
- Hubble's "Impossible" Galaxies Materialize Like Magic: Not until 1925 was it definitely decided whether they (nebulae [space dust]) belonged to our Galaxy, or represented remote island universes as Kant had suspected... Edwin Hubble specialized in the peculiar problems of nebular photography.... Picture after picture showed the expected red shift of the spectra, which meant that the nebulae were fleeing from us.... Moreover, the too-perfect

mathematical relationship between the distance of the nebulae and the red shift aroused suspicion. Perhaps light changed its wave length during such tremendous journeys, losing energy and arriving at our instruments redder than it was when it started. Perhaps the total gravitation of the universe affected the light, and the red shift could be explained as an Einstein effect.... Astronomers at any given time look at nebulae of such different ages that the question must be raised: have they any right to compare them with one another? Hubble decided on a complicated experimentum crucis. It contained so many possible sources of error, made so many dubious assumptions, that the slightest alteration in a figure would change a result to its opposite. Nevertheless, Hubble believed that the experiment proved his conclusion: the red shift actually indicates retreating nebulae; that the extragalacitic universe is steadily expanding. (Rudolf Thiel [translated from the German by Richard and Clara Winston], And There was Light, Alfred A.I Knopf, NY, 1957, pp 384-389)

- Galaxies Close by: When the *Atlas* was complete, I discovered that across my most disturbed peculiars were pairs of radio sources. Very nice. Obviously the disturbance had been caused by the ejection of the radio sources. Then came the shock: some of the radio sources turned out to be quasars! And the galaxies were not at great distances, but relatively close by." (Halton Arp, *Seeing Red*, p. 6)
- Redshift not Cosmological: H. Arp has pointed out that quasistellar objects and peculiar galaxies occur together with a frequency
  greater than that of a chance coincidence; therefore certain quasistellar objects are associated with peculiar galaxies which we know
  are not at extremely great distances. Therefor the redshifts are not
  cosmological, i.e., a result of Hubble's law... It may well be that
  there is another cause for the observed redshifts. Then Arp's final
  suggestion, "some as yet unknown cause," would be correct. (Baker
  and Fedrick, An Introduction to Astronomy, 7th ed, pp. 336-37)

#### ■ What else can cause redshift?

**Tired Light:** If the redshift of galaxies is not due to expansion velocity, then what might cause the redshift? ... Basically, anything that causes light to lose energy will cause a redshift. "Tired light" theory, in which intergalactic matter is supposed to be responsible for the energy loss of light. (Tom Van Flandern, *Dark Matter, Missing Planets & New Comets*, 1998, p. 398)

**Loss of Energy:** The essential property which must be present to produce a redshift of light is a loss of energy. The most common

- way to produce a lost of light energy is a recessional velocity. Another way is by having light climb out of a strong gravitational field. Still another way is travel through a resisting medium. (Tom Van Flandern, *Dark Matter...*, p. 92)
- **Redshift is Impossible to Disprove.** Because there is no other parameter besides redshift that is easily observable in a faint, featureless galaxy, the custom of assigning the distance to such a galaxy according to the size of its redshift has become established. If a galaxy has a faint apparent magnitude for its redshift, we say it is under luminous or a dwarf, and the reverse if it is apparently bright for its measured redshift. I wish to emphasize that there is no way of ever producing any discordance with the redshift-distance relation for even one single object when operating from the base of current assumptions. This is true because no matter where a galaxy point falls in the redshift-apparent magnitude diagram its position can be explained in terms of high or low intrinsic luminosity. For example, the quasars fall generally above the Hubble line in the redshiftapparent magnitude diagram, but they are not concluded to have excess redshift – they are instead said to have excess luminosity.... In the past, of course, any discordantly high redshifts measured in a cluster were simply assumed to be background galaxies without any further investigation. (Arp, The Redshift Controversy, 1973, p. 17)
- Because it is impossible to disprove, it is in fact not a scientific theory, but a dogmatic myth: Today any newspaper, science magazine or discussion of scientific funding will take for granted that we know all the basic facts: that we live in an expanding universe, all created in an instant out of nothing, in which cosmic bodies started to condense from a hot medium about 15 billion years ago.... For those who have examined the evidence on redshifts and decided the redshifts are not primarily velocity, however, the important question arises as to how a disproved assumption could have become so dominant.... But in this field the adjustable parameters are endless and one never hears the crucial words: "It just won't work, we have to go back and reconsider our fundamental assumptions." (Halton Arp, Seeing Red, p. 257)
- The reason Arp finding have been resisted: The conventional viewpoint assumes that all galaxy redshifts are due only to Doppler velocities of recession. Therefore, if we can produce just one example of a redshift difference that cannot be explained as a velocity difference, then we have broken the assumption on which the redshift-distance relation is always applied to derive distances.

(Arp, *The Redshift Controversy*, 1973, p. 17) **Arp's book,** *Seeing Red*, manifest his findings of discordant readings and his struggle to get the "scientific" world to acknowledge them. They won't acknowledge the discrepancies because then their whole careers will then seemed to have been a waste of time. Egos won't allow it.

- Peer Pressure, not Review: The reaction of most of the audience was nil. As usual younger astronomers were frightened for their careers. The established astronomers were inured to disregarding observational proofs from certain pariahs which would invalidate the assumptions on which they had built their careers. Some local researchers afterwards showed me privately some evidence that they had uncovered. But there was no one to encourage and shelter them so nothing more has been heard from them. The two protectors of the orthodoxy on the organizing committee, however, felt obliged to supply some reasons why the observations should be disregarded.

  (H. Arp, http://www.haltonarp.com/?Page=Abstracts&ArticleId=4).
- **Scientists,** particularly at the most prestigious institutions, regularly suppress and ridicule findings which contradict their current theories and assumptions. (Halton Arp, Seeing Red, p. 12)
- Amateurs have a much better grasp of the realities of astronomy because they really *look* at pictures of galaxies and stars.

  Professionals start out with a theory and only see those details which can be interpreted in terms of that theory. (Halton Arp, Seeing Red, p. 23)

### Who is Halton Arp?

cp18» Halton C. Arp received his Bachelors degree from Harvard College in 1949 and his Ph.D. from California Institute of Technology in 1953, both cum laude. He is a professional astronomer who, earlier in his career, conducted Edwin Hubble's nova search in M31. He has earned the Helen B.Warner prize, the Newcomb Cleveland award and the Alexander von Humboldt Senior Scientist Award. For 28 years he was staff astronomer at the Mt.Palomar and Mt. Wilson observatories. While there, he produced his well known catalog of "Peculiar Galaxies" that are disturbed or irregular in appearance. (Statement from Arp's web site, July 2006) "My career at the Observatories in Pasadena slightly overlapped Edwin Hubble's. He personally gave me my first job." (Halton Arp, Seeing Red, p. 8)

## Foundations for the "Earth is Young System"

**cp19» (1) No Scientific Evidence For Evolution.** The first foundation for the "earth is young" theory is the lack of real evidence that the earth is old. There is sound evidence against the red-shift method for ascertaining distances in space, against radioactive dating methods, and all other methods of dating the earth as old (see *Science Papers*; Jeremy Rifkin, *Algeny*, 1983; Field, Arp, and Bahcall, *Red-Shift Controversy*, 1973; John C. Whitcomb and Henry M. Morris, *The Genesis Flood*, 1961; etc.).

cp20» (2) Proof that the Earth is Young. The second foundation for the "earth is young" theory are the *many* methods that prove the earth is young. They are at least 76 methods that prove the earth can not be older than 500 million years and of these 24 indicate that the earth is no older than 20,000 years. These methods include such things as the influx of titanium, or cobalt, or zinc, or mercury, or silver, or copper, or gold, or silicon, or nickel into ocean via rivers. If the earth was billions of years old, the ocean would be a soup of pollution without any life in it. And such methods as the influx of meteoritic dust from space, or development of total human population, or lack of vast amounts of ancient cultural debris, the decay of the earth's magnetic field, the decay of C-14 in pre-Cambrian wood, the growth of active coral reefs, the formation of river deltas, decay of short-period comets, and the instability of rings of Saturn show a young earth. These 76 methods are based on the assumption that there were constant rates, no initial daughter components, and all were in a closed system. These methods lead to an even younger age for the earth if, for example, there were some initial daughter components at the beginning (see Scientific Creationism, 2nd Ed., Chapter VI; Harold S. Slusher, Age of the Cosmos; Henry M. & John D. Morris, Science, Scripture, and the Young Earth, 1989 Edition, Chapter 8; Henry M. Morris, "The Young Earth," ICR Impact Series, No. 17).

cp21» (3) Biblical Chronology. The third foundation of the "earth is young" theory is the belief in the Biblical chronology, or in creation without mixing the false theory of evolution into the picture. And this in turn is based on the proof that the Bible is a sound document, more sound than any other ancient document ("Bible Paper" [BP3]). And this in turn is the belief in a powerful God, not a belief in a powerless and mystical God or the false belief in the magical evolution.

cp22» Your Mindset Limits You. What system you believe in depends on your belief, your research on *both* belief systems, your biases, your world view, and your mindset (perceptual set). The more you research different points of view, the more you see that the world sees through filters that

color its perception of reality. To the Evolutionist the world is old. To the Creationist the world is young. It is difficult for either group to prove their case to the other group. Since the only witness to the Beginning (Creation) was either the powerful God or the magic of Evolution, it is only through inductive thinking that we can come to a conclusion. We must piece evidence upon evidence. But for most of us our "mindset" or "world view" interferes with our judgment. We see what we want to see and subconsciously disregard what we do not want to see.

Before we examine Biblical chronology, we must look carefully at secular chronology.





## **CP2: Secular Chronology**

**Contradicts Bible** 

Reconstructed Lists

**Astronomical Calculations** 

All About Eclipses

**Identification Game** 

Secular Dates & Ptolemaic Canon

**Juggling Economic Texts** 

Reading Dates into Texts

77 years of Missing Dates

Other Problems

## **Secular Chronology Before 626 BC is Dubious**

**cp23**» *Overview of This Section*. There are three points that make today's secular and most so-called Biblical chronologies dubious and I believe in many areas wrong.

## **Contradicts Bible (1)**

cp24» The first point (1) is that all secular chronologies that I am aware of contradict Biblical evidence. This, in itself, means little to someone who thinks the Bible is largely myth. But there is much evidence that contradicts this negative view of the Bible (see "Bible Paper" [BP3]). One should also learn to distinguish between Biblical evidence and Biblical interpretations of evidence. Because I believe in the veracity of Biblical facts, I, of course, give great weight to point (1).

### King Lists (2)

cp25» The second point (2) is that most secular and even Biblical chronologies give great weight to such things as king lists. I will show the

dubiousness of these lists and that you should give little weight to them for the most part.

## **Astronomical Calculation (3)**

cp26» The third point (3) is that most modern chronologies rely on "astronomical calculation" especially retro-calculations of eclipses. I will show that most astronomical evidence is dubious and should be given little weight except for a few cuneiform tablets that also contain times and positions of several planets as well as times of eclipses. After you study the *Chronology Papers* you will understand how dogmatic and naive the claim is that the Egyptian, or Assyrian, or Grecian chronologies, or areas in them, are "astronomically confirmed."

## 1: Contradicts the Bible

**cp27**» Contemporary-secular chronology before 626 BC contradicts the chronology of the Bible. This in itself is no evidence to many that the Biblical chronology is correct. It is merely a beginning point in our examination of conventional chronology.

**cp28**» William F. Albright said, "The Babylonian Chronicle ... and the Assyrian eponym lists, with the aid of the eclipse of the year 763 ... enable us to correct the transmitted chronology of the Bible" (*Recent Discoveries in Bible Lands*, 1936). Notice he says "to correct" the chronology of the Bible.

[An Eponym list is a list of persons officiating as an eponym for a certain year; each year a different person or king or official or governor was designated as that years' eponym: instead of the year being designated by a number, the year was named after the person who was eponym for that year.]

## Edwin R. Thiele

**cp29**» Thiele is an author of a popular rendition of chronology. His chronology is considered a Biblical one. He is widely quoted by secular and Biblical scholars. But Edwin R. Thiele indicates in his writings that Biblical chronology must conform to the Assyrian eponyms along with the apparent 763 BC eclipse of the sun (*A Chronology of the Hebrew Kings*, 1977, pp 28-30, 82-85).

cp30» Even though he is considered a Biblical chronologist, he nevertheless "corrects" the Bible by using the reported eclipse of 763 BC and by using an Assyrian list of eponyms. I disagree here. Thiele does not understand the dubiousness of using an eclipse to date events or the dubiousness of using the Assyrian list of eponyms to "correct" the Bible.

### Some of the things wrong with Thiele's chronology are as follows:

cp31» (A) Thiele in his 1977 paperback book, A Chronology of the Hebrew Kings, tries to show that Biblical scripture on the reigns of the kings are hopelessly mixed and contradictory by mentioning some apparent contradictions and by quoting some words of noted scholars to the same effect (Chapter 1). But in the Chronology Papers all these apparent contradictions are successfully harmonized. Thiele is too quick to embrace evidence of the apparent eclipse of June 15, 763 BC and he does not understand the dubiousness of identifying dates merely from one reported eclipse. Thiele at the end of Chapter one says in effect that he has the

solutions, but his solutions ignore scripture and he reasons against some scripture (pp. 54ff).

**cp32» (B)** Thiele *establishes* his chronology based not on the Bible but on secular chronology (Chapter 3, pp. 28ff). He uses the eclipse that is reported to have occurred on June 15, 763 BC along with the reconstructed Assyrian eponym list(s) (pp. 28ff). For example he states that:

"For many years Old Testament scholars have noticed that a total of 128 regnal years for the rulers of Judah from the accession of Athaliah to the end of Azariah ... was about a quarter of a century in excess of the years of contemporary Assyria ..." (p. 44).

He tries to solve this problem by squeezing the Biblical chronology together so that it will agree with the Assyrian chronology by using "dual dating" and "overlapping regnal" schemes (Chap. 4 to 7). But this problem of the missing 25 years may have something to do with corrupt Assyrian kings' list(s) and/or by the misidentification of the reported eclipse.

- **cp33**» Although the eclipse mentioned when Bur-Sagale was eponym is said to be the one on 763 BC, according to Mitchell, it could just as well have been on 791 BC, or 771 BC, or 770 BC using the conventional BC-AD dates (see *Eclipses of the Sun*, By Samuel Alfred Mitchell, 5th ed., 1951, p. 26). And as we learn under "Astronomical Calculations," [cp83] this eclipse, if it was a real eclipse, could have been in many other periods
- **cp34» (C)** In chapter 6 Thiele tries to fit Israel's king Pekah's reign before king Pekahiah in order to squeeze the Biblical chronology into the Assyrian chronology. But the Bible clearly says that before king Pekah became king (he became king by killing Pekahiah) he was the captain of king Pekahiah:

"But Pekah the son of Remaliah, a captain of his [Pekahiah], conspired against him, and smote him in Samaria, in the palace of the king's house ... and he killed him, and reigned in his room" (2 Ki 15:25).

- **cp35**» This scripture clearly shows Pekah reigning only after he killed Pekahiah, for Pekah was a captain of the king before this event. How can Thiele have Pekah coming to reign before Pekahiah? He does this by changing scripture to suit his own theories and by saying without any proof that the scriptures were "late calculations" of records that were lost (pp. 57-60ff).
- cp36» In Thiele' 1983 version of his, *The Mysterious Numbers of the Hebrew Kings*, he is very aware of the problem his chronology causes for

the scripture concerning Pekah, for he goes to great lengths to defend his idea (pp. 120, 129-137, 174).

**cp37» (D)** Thiele's twisting and "reasoning" against scriptures concerning the reigns of Hoshea and Hezekiah is way off the mark (chap 7). Thiele's main apparent goal is to fit Biblical chronology into the broken Assyrian chronology. But the Assyrian chronology cannot be trusted (see # 2 & 3 below).



# 2: Reconstructed Eponym List(s) and King List(s)

cp38» Secular chronology before 626 BC cannot be relied on because it is based in part on lists of Assyrian eponyms and kings from *different* cuneiform sources which has been *reconstructed* so as to show an almost continuous list of reigns of Assyrian kings starting with Enlil-nasir II (1432-1427 B.C.) down to about 647 B.C, conventional dating (see Grayson, *Assyrian Royal Inscriptions*, Vol. 1 & 2; etc.). Even Egyptian and Sumerian chronologies in part rely on the Assyrian lists (see below). There are at least 66 Assyrian kings listed before Enlil-nasir II, but the King List is too fragmented and incomplete in details prior to his reign so that it is impossible to give dates for these kings with any reliability. I am not saying that the King list after Enlil-nasir II is reliable. An analysis of some of the data concerning the reconstruction can be found in Anstey's *Chronology of the Old Testament* (Kregel edition, 1973, pp. 98ff & 110ff). Also in the *Cambridge Ancient History*, Volume I (1923), it gives information and references on the reconstruction of these eponyms.

(chap. IV, see pp 149ff; also see *The Cambridge Ancient History*, 3rd Ed. Vol. I, Part 4 [1970], pp. 193-200; and see Rogers, Robert William *A History of Babylonia and Assyria*, 2nd Ed., Vol I [1901], pp. 323-325, 312-348; Grayson *Assyrian and Babylonian Chronicles*, [ABC] pp. 196, 269; and see E.R. Thiele, *The Mysterious Numbers* ..., 1983, pp. 142-149.)

## Some quotes from these latter sources:

## Eponym List(s)

cp39» "While the early Mesopotamians and Babylonians named their years after important events, the Assyrians named theirs after *limus*. The *limu* was a title assumed by a different high official each year, the officials following one another according to a definite order. Thus the names of the *limus* were ready-made year names and the Assyrians did not have to compose year names as the early Mesopotamians did. In the same way that the early Mesopotamians compiled lists of the year names as chronological aids, so the Assyrians compiled *limu* or eponym lists" (Grayson, *ABC*, p. 196).

**cp40**» "A number of copies of the eponym canons must have existed, for numerous fragments have come down to us. These [sic] it has been possible to piece together in the correct order largely by means of the Canon of Ptolemy, to be mentioned below" (Rogers, p. 323, my emphasis).

- **cp41»** Sir Henry Rawlinson found four copies or canons or lists of Eponyms; there were about seven lists or fragments found by 1913 (Anstey, *Chron. of the Old Test.*, 1973 reprint, p. 110).
- **cp42»** "The eponym-lists, except for one small fragment, do not reach back beyond the eleventh century B.C" (C.A.H., Vol I [1970], p. 195).
- **cp43»** "Babylonian Chronological Materials. The Babylonian priests, historiographers and chronographers have left us an enormous mass of chronological materials, all now in a fragmentary state..." (Rogers, p. 312).

## King List(s)

- cp44» "The Assyrian King List is a list of the kings of Assyria beginning with the earliest monarchs and coming down in time as far as the reign of Shalmaneser V (726-722 B.C.). The list is divided into sections by horizontal lines. Each of the first few sections mentions several kings but thereafter each section deals with the reign of only one king. The information given concerning the early kings is sparse owing to lack of sources, as the ancient author admits. The list provides an excellent chronological framework but is not infallible. On occasion kings are omitted, the regnal years are not always accurate, the filiation is sometimes erroneous, and the order of the rulers is not entirely correct. The list seems to have been compiled in the form in which we now know it during the reign of Shamshi-Adad I" (Grayson, Assyrian Royal Inscriptions, 1972, Vol. 1, p.).
- cp45» "These two King Lists have been repeatedly copied, collated, and verified. The chief literature upon them is as follows: (a) *Proceedings of the Society of Biblical Archaeology*, 1884, pp. 193-204 (Pinches). (b) ..." (Rogers, p. 313, footnote 1 & 2). We must note here that when you "collate" two lists you are taking some from one list and some from the other list: making one list out of two. There are at least four versions of the lists not two.
- **cp46»** "There are four versions (here designated A, B, C, and D) of the Assyrian King List." "There are two fragments.." (Grayson, *ABC*, 269 & 270).
- cp47» "The eponym-list which is behind the Assyrian king-list was damaged, or otherwise deficient, for the interval between Shamshi-Adad I and Adasi. There is also heavy damage to the king-list, in all three copies, for the reigns between Erishum I and Shamshi-Adad I. Before Erishum I no figures were quoted. This means that the king-list is not a reliable source for the period prior to the beginning of the dynasty of Adasi. For the next few centuries we have no means of verifying its reliability ..." (C.A.H., Vol. I [1970], p. 195).

- **cp48**» "Although the royal names are rather deformed, it is possible to connect Ptolemy's Canon with the Assyrian lists, and in this manner all the dates can be fixed as far back as the beginning of Adad-nirari's reign" (A.C.H., Vol I [1923], p. 149).
- **cp49»** As described above there is a difference between the Assyrian Eponym lists and King lists. The Eponym lists are less fragmented than the King lists. But from the fragmented nature of these lists and because they were *reconstructed* by scholars in the last hundred or so years (by scholars who lived thousands of years after the facts), I wouldn't give much credence to "facts" based on the Assyrian kings list or Eponym list. At best these lists are approximate. As previously quoted from Grayson, "the Assyrian royal scribes were prone to hyperbole, hypocrisy, and even falsehood."

## Egyptian Chronology and King Lists

- cp50» For the most part Egyptian chronologies rely on contradictory copies of the Manetho's king list and on some vague astronomical observations such as the one that was supposed to have occurred in 1536 BC as well as some connection to the Assyrian king lists (see Budge, *The Book of the Kings of Egypt*, Vol. 1, pp xxviii-xxix, xl-xlii; lii-lix"Radical Exodus Redating Fatally Flawed," by Baruch Halpern, *Biblical Archaeology Review*, Nov./Dec., 1987, footnote 1, p. 61).
- **cp51»** "The Egyptian chronology is based on the list of the Pharaohs, made by Manetho under Ptolemy II" (Bickerman, *Chronology of the Ancient World*, p. 82; Budge, *The Book of the Kings of Egypt*, Vol 1, Chap. 2).
- **cp52**» Finegan in his *Archaeological History*, mentions other Egyptian king lists beside the list of Manetho, the list on the Palermo Stone, the Table of Abydos, the table of Saqqara (Sakkara), and the Turin Canon of Kings (p.184).
- **cp53**» W.B. Emery in his *Archaic Egypt*, also mentions different king lists:
  - "The old Egyptian records consist of five king lists. These are:
  - **1.** The 'Tablet of Abydos' inscribed on the walls of a corridor of the temple of Seti at Abydos, listing a series of the *nesu* names of seventy-six kings from Menes to Seti I.
  - **2.** The 'Tablet of Karnak,' now in Paris, originally listed the *nesu* names of sixty-two kings from Menes to Thotmose III, but it does not compare with the Abydos list in value, for it was largely based on tradition rather than on formal chronicles.

- **3.** The Tablet of Sakkara, found in the tomb of the Royal Scribe Thunery and now in the Cairo Museum, lists the *nesu* names of forty-seven kings beginning with Merbapen (Enezib) and ending with Rameses II....
- **4.** The Turin Papyrus, written in hieratic, presents a list of kings with the length of each reign in years, months, and days. Unlike the monumental lists of Abydos, Karnak, and Sakkara, it does not stop with unification and the First Dynasty, but goes back beyond mortal kings to the dynasties of the gods....

Valuable as it is, the Turin Papyrus is a tragedy, for more than half its value has been lost by careless treatment. Originally in the possession of the king of Sardinia, it was sent to Turin in a box without packing and it arrived at its destination broken into innumerable fragments. For years, scholars have worked to fit together what remained, but even so, in it restored state, many important gaps occur and the order of some of the kings remains in consequence a matter of debate. Of the seventeen kings of the Archaic Period, only ten are definitely recognizable.

**5.** Finally we have the so-called Palermo Stone which, like the Turin papyrus, represents another tragedy for archaeological research. Only five small fragments of a great stone slab, originally about 7 ft long and 2 ft high, are in our hands and no record remains which will give a clue to where these pieces were found.... The slab of black basalt was lightly inscribed with the annals of the first five dynasties and also the names of the kings of Upper and Lower Egypt who ruled the two separate kingdoms before the Unification.

Of the Classical sources Herodotus was of limited value, for he trusted too much in the stories related to him by the dragomans who guided him in his travels in Egypt, apparently making no attempt to establish the historical truth of the information thus obtained. But the fragmentary extracts taken from the writings of Manetho by Josephus and by the Christian chronographers Africanus (A.D. 300) and Eusebius (A.D. 340) were of immense importance and formed the framework on which Egyptian history has been built" (pp. 21-23).

cp54» In Budge's *The Kings of Egypt*, he writes:

• "Now if we compare these lists [Tablet of Abydos & Tablet of Sakkarah] with each other, it becomes at once clear that, although they are both supposed to cover the same ground, they differ considerably in many places. Thus the Tablet of

Sakkarah opens with the name of Merbapen, which is the sixth in the Tablet of Abydos, and the Tablet of Abydos contains a batch of eighteen names for which there is no equivalent in the Tablet of Sakkarah. We are therefore obliged to conclude that those who drew up these lists have only given us series of selected names. Moreover, monuments bearing numbers of royal names which are not included in either list are well known to Egyptologists. The order of the names is substantially the same in each list, but we may note that in the Tablet of Sakkarah names Nos. 37-46 are written in reverse order. Each list stops at the beginning of the XIX dynasty, and therefore we can obtain no help from either in constructing a list of the remaining kings of that dynasty, or of the following dynasties. For help in this difficulty recourse must be had to the famous List of Kings, which tradition says was drawn up for Ptolemy Philadelphus in the third century before Christ by Manetho of Sebennytus.... His work is lost, but four versions of the King List are extant, and are found in the 'Chronography' of GEORGE THE MONK, the Syncellus of Tarasius, Patriarch of Constantinople, who flourished in the VIIth century of our era. The oldest version of the King List is that of the Chronicle of Julius Africanus, a Libyan who flourished early in the IIIrd Century A.D., which is preserved in the Chronicle of Eusebius, Bishop of Caesarea (born A.D. 264, died about 340). Eusebius himself gives a King List, which contains many interpolations. If the versions of the King List of Manetho according to Africanus and Eusebius be compared, it will be seen that they do not agree in the arrangement of the dynasties, or in the lengths of the reigns of the kings, or in the total number of kings assigned to the different dynasties. Thus Africanus makes 561 kings reign in 5524 years, while Eusebius gives the number of kings as 361, and he says their total reigns amount only to 4480, or 4780 years. The version of Africanus agrees better with monuments than that of Eusebius. It is probable that Manetho drew on the writings of the best authorities available in his time, but it is very doubtful if the sources of his information were complete or wholly trustworthy" (Budge, p. xl-xli).

cp55» Budge summarizes it:

- "In dealing with Egyptian Chronology it must always be remembered that, comparatively speaking, little is known about it. Many writers on the subject have spent much time and ingenuity in trying to make facts derived from the monuments square with Manetho's King List, and the result of their torturing of the figures and their manipulation of the names has frequently obscured the truth" (Budge, p. xllii).
- "To construct a perfectly complete series of the kings of Egypt, with their dates, we need a complete set of monuments which would tell the order of the succession of the kings, and the length of each king's reign. Such a set of monuments does not exist, and therefore no complete system of Egyptian Chronology can be formulated" (Budge, p. xlii).

## Egyptian Kings' Multiple Names

cp56» Manetho used a Greek form for the names of the Egyptian kings. This makes the identification of Manetho kings difficult because of the radically different spelling. Furthermore, as just quoted from Emery's *Archaic Egypt*, some king lists used *nesu* names of the kings. The kings of Egypt had many different names: *Horus* name (Ka or 'double' name); *nesu* name; *nebti* (nebty) name; *insibya* name; *prenomen* name or throne name (Suten Bat); or even the kings personal name, *nomen* (son of Ra name) (Emery, pp. 21-23, 33ff; Finegan, p. 185ff; Budge, pp. xi-xxvii).

**cp57**» Rameses II had at least 72 names (E.A. Budge, *The Book of the Kings of Egypt*, Vol. 1, pp. 165-177).

**cp58»** "The difficulty does not lie in the order of succession of the kings according to their Horus names.... The difficulty and subject of dispute ... lies in the identification of the Horus names with those submitted by Manetho and those shown on the monumental lists" (Emery, p. 32).

cp59» *Manetho*. There is great "diversity of opinion among Egyptian historians," and this equals "vexed question of chronology" (Emery, p. 28). "There is reason to doubt the strict accuracy of Manetho's figures, for they show every sign of being distorted by the carelessness of his copyists" (Emery, p. 29, he then gives examples between different versions of Manetho's list; Budge, ... *Kings* also compares different versions, pp. lxi-lxxiii).

**cp60**» Breasted in his *A History of Egypt*, also stated that the chronology of Manetho is a late and careless compilation especially of the earlier kings which were "built up on folk-tales and popular tradition of early kings" (pp. 18, 10, Bantam edition). "The dating of the earlier Egyptologists, placing the

foundation of united Egypt in the region of 4400 B.C., has long been discarded" (Emery, p. 28). At the time Emery wrote his *Archaic Egypt* (1961) the 4400 BC had been reduced to 3100 BC - 2800 BC where it now stands (p. 28).

**cp61»** "By vocation Manetho was an Egyptian priest associated with the city of Serapis. He was not only well versed in the high Greek culture of his day, but he was also thoroughly familiar with Egyptian lore and could read hieroglyphics. He was the first Egyptian to write a history of his country in Greek.

cp62» Manetho was also, like so many of the well-educated Hellenistic Egyptians, anti-Jewish. Indeed, he figured prominently in the Egyptian emergence of anti-Jewish polemical literature in the third century B.C., especially in Alexandria. Ironically, a Jewish historian was responsible for preserving most of the fragments of Manetho's writing. Josephus, the famous Jewish historian of the first century A.D., quotes extensively from Manetho, and it is primarily in this way that Manetho's work has come down to us" ("Jacob in History," Aharon Kempinski, Jan - Feb 1988, *Biblical Archaeology Review.*).

## **Egyptian Dates Astronomically Fixed?**

**cp63**» Many think wrongly that Egyptian chronology is fixed in the heavens, that it is astronomically fixed. Kathleen Kenyon in her *Royal Cities of the Old Testament* makes just such a statement:

"Dates for Palestine are dependent on the Egyptian calendar, which was based on astronomical observations. These can be astronomically related to the modern calendar. With a varying degree of precision, the recorded regnal years of the Egyptian rulers can be fitted in to the astronomical calendar. There are elements of doubt, and the dates preferred by different scholars vary" (p. x).

cp64» In James Henry Breasted, A History of Egypt, in his "Chronological Table of Kings" he indicates many dates in his table are "astronomically fixed." How these dates are "astronomical fixed" he doesn't say. It cannot be based on eclipses since, "from the enormous wealth of written documents from ancient Egypt we have only one doubtful reference to a partial solar eclipse of 610 B.C.... Not a single Egyptian observation is quoted in the Almagest... There exists one Coptic eclipse record of 601 AD..." (O. Neugebauer, Exact Sciences in Antiquity, notes for Chap IV). Neugebauer from his book, Exact Sciences in Antiquity, sums it up:

"In summary, from the almost three millennia of Egyptian writing, the only texts which have come down to us and deal with a numerical prediction of astronomical phenomena belong to the Hellenistic or Roman period. None of the earlier astronomical documents contains mathematical elements; they are crude observational schemes, partly religious, partly practical in purpose. Ancient science was the product of a very few men; and these few happened not to be Egyptians" (p. 91).

cp65» "The present writer [Budge] has no wish to belittle in any way the importance of the help which astronomical calculations may afford the Egyptologist in his chronological difficulties, or to deny their general accuracy, but the variations in the results obtained by the different authorities from the same data must tend to make every one hesitate to accept blindly dates which are declared by their advocates to have been ascertained astronomically, and to be 'absolutely certain'" (Budge, p. lvii).

cp66» As we will see in the "Astronomical Calculations" [cp83] section, eclipses and other so-called astronomical evidence are very dubious. The so-called total eclipse of the moon in the time of Takelot II of the so-called XXII Egyptian Dynasty reads:

"...the heaven could not be distinguished, the moon was eclipsed (literally *was horrible*), for a sign of the events in this land...." (H. Brugsch-Bey, *A History of Egypt*, London, 1894, p. 226)

Please see our "Astronomical Calculations" section to understand that such vague references to 'eclipses' are worthless for date setting.

## **Egyptian King Lists: Conclusion**

cp67» Because of the nature of the king lists of Egypt, with its internal contradiction, because the same Egyptian king used many names, because of the different ways cuneiform names can be spelled, because I know of no comprehensive study on how the Hebrews spelled the king's names of Egypt or what names they did use, I cannot harmonize the pharaohs of Egypt with the chronology of the Bible at this time. Those who say that the Egyptian chronology is based on astronomical evidence don't understand how vague and unreliable is the evidence. The so-called astronomical evidence used to prove the Egyptian dates has to do with the fallacious "Sothic period," vague reports of eclipses and new moons, and even through the use of the Assyrian King lists because of certain associations between

Egypt and Assyria. See Donovan A. Courville in his *The Exodus Problem* and its Ramifications, Vol 2, Chapter IV for arguments against Sothic dating.

(Budge, ...Kings, pp. xlv ff; Baruch Halpern, "Radical Exodus Redating Fatally Flawed," *Biblical Archaeology Review*, Nov.- Dec. 1987, footnote 1, p. 61; Hall, *Cambridge Ancient History*, Vol., p. 170; for critique see Velikovsky, *Peoples of the Sea*, pp. 206ff, 215ff; and see Courville, *The Exodus Problem*, Vol 2 pp. 48ff; and see "Astronomical Calculations," below)

## Sumerian Chronology And Hammurabi

cp68» Were Sumerians, called Sumerians? The Sumerians are felt to be one of the most ancient nations. (The evidence is too dubious for me to date the so-called Sumerians: too much is made of too little evidence.) "By the end of the fourth millennium B.C. Sumerian civilization was fully developed. This statement involves a question which has often been discussed, 'Who were the Sumerians?'. The adjective 'Sumerian' has been formed by modern scholars from the place-name 'Sumer' which from the late part of the third millennium B.C. was the name regularly used for southern Mesopotamia as opposed to 'Akkad,' the northern part of the river valley; but the inhabitants did not call themselves 'Sumerians,' they were simply 'The people of Sumer'. For the modern historian the invention of the adjective 'Sumerian' was convenient for distinguishing a particular language, a particular people, and a particular civilization" (Ur of the Chaldees, [1982], p. 44).

**cp69**» This is why the Sumerians are not named in the Bible. The Sumerians had another name or names, but so far no scholar has ascertained it. Not only is the name of this people unknown, but a noted author on the Sumerians, admits that the history of Sumer is dubious:

"The second chapter deals with the history of Sumer from prehistoric days ... to the early second millennium B.C... Because of the fragmentary, elusive, and at times far from trustworthy character of the sources, not a few of the statements in this chapter are based on conjecture and surmise, and may turn out to be true only in part or even to be entirely false" (*The Sumerians*, Samuel Noah Kramer, 1963, pp. vii-viii).

#### Hammurabi

cp70» The chronology of Sumer is keyed to the reign of Hammurabi:

"Let us now turn to the problem of dating in order to see what justifies the statement made in the preceding pages that Sumerian

literature represents the oldest written literature of any significant amount ever uncovered. The tablets themselves, to judge from the script as well as from internal evidence, were inscribed in the Early Post-Sumerian period, the period following immediately upon the fall of the Third Dynasty of Ur. Just as a rough point of reference, therefore, the actual writing of the tablets may be dated approximately 1750 B.C. and (pp. 18-19, Sumerian Mythology, by Samuel Noah Kramer, Harper Torchbooks:1961)

"a The date 2000 B.C. assigned to the clay tablets on which the Sumerian compositions are inscribed should be reduced by about 250 years as a result of recent studies which point to a date as low as about 1750 B.C. for Hammurabi, a key figure in Mesopotamian chronology" (p. 120, Supplementary Notes, Kramer, 1961).

**cp71»** At first Hammurabi was believed to have reigned about 450 earlier than 1750 BC:

- L.W. KING in his *The Letters and Inscriptions of Hammurabi*, (1900), dated Hammurabi from about 2200 BC.
- The chronology of this period is only approximately fixed, and any attempt to definitely settle the various problems it presents and to assign the accession of each king of the First Dynasty to a particular year must be regarded as purely provisional. If the List of Kings were perfectly preserved this would not be the case; as it is, the principal evidence by which the general date of this dynasty is fixed consists of two passages in cylinders of Nabonidus. From one of these we learn that Burna-Burias lived 700 years after Hammurabi, and from the other that Sagasalti-Burias lived 800 years before Nabonidus. Since Burna-Burias and Sagasalti-Burias are both kings of the Third, or Kassite, Dynasty, these two references enable us to roughly fix the date of Hammurabi at 2200 B.C."

(L.W. King, *The Letters and Inscriptions of Hammurabi*, 1900, pp. LXIX-LXX, AMS Press reprint)

cp72» The revision of the contemporary date of the reign of Hammurabi has to do with his contemporary, the Assyrian king Shamshi-Adad I, who is

found in the Assyrian King List (Assyrian Royal Inscriptions, Albert Kirk Grayson, Vol. 1, 1972, p. 157, "1813-1741").

**cp73»** From Jack Finegan's, *Archaeological History of the Ancient Middle East*, we see that in the "tenth year name" of Hammurabi the text:

■ "also dates the record of a legal action in Babylon involving a person of probable Assyrian origin, in this the usual oathformula names both Hammurabi and Shamshi-Adad. Thus, an important synchronism shows that this king of Assyria, Shamshi-Adad I (1813-1781), was still on the throne in the ninth year of Hammurabi (1784)" (p. 61).

**cp74»** The palace of these rulers at Mari, which was defeated by Hammurabi:

"preserved royal archives in the form of more than 20,000 cuneiform tablets, almost all in the Babylonian language... These include administrative and economic documents, political and diplomatic communications, and a few literary and religious compositions.

The diplomatic correspondence touches upon events in the reigns of ... Shamshi-Adad I of Assyria ... and of Hammurabi of Babylon. The correlations thereby provided have much to do with the fixing of the chronology of this period. Similar historical and chronological importance also attaches to cuneiform tablets found at Alalakh (Tell Atchana, on the road from Aleppo to Antioch and the Mediterranean)" (pp. 63-64).

cp75» E.J. Bickerman in his Chronology of the Ancient World, writes:

"Yet, recently discovered documents prove that Hammurabi was contemporary with Shamshi-AdadI of Assyria, who, according to the Assyrian list, reigned in the second half of the eighteenth century. Should we bring Hammurabi down or move Shamshi-Adad up? The rather fluid chronology of the Pharaohs and the Hittites and vague archaeological inferences led recent scholars to suggest 1792-1750 or 1728-1686 as the most probable dates of Hammurabi. Other scholars prefer to place him in 1848 or even *c.* 1900. As a matter of fact, the Assyrian kings themselves disagree with each other and with the information supplied by the royal list when they state the interval between a given king and some predecessor" (pp. 84-85).

**cp76**» Hammurabi's years were lowered over 400 years mainly because of the Assyrian King List. But Jacobsen doubts this data because he

distrusts the older parts of the Assyrian list (The Sumerian King List, pp. 191-193ff).

cp77» Jacobsen has reasons to doubt the older parts of the Assyrian king list:

"The list is divided into sections by horizontal lines.... The information given concerning the early kings is sparse owing to lack of sources, as the ancient author admits. The list provides an excellent chronological framework but is not infallible. On occasion kings are omitted, the regnal years are not always accurate, the filiation is sometimes erroneous, and the order of the rulers is not entirely correct" (Assyrian Royal Inscriptions, Vol. 1, Grayson, p. 1).

cp78» Instead of dating Hammurabi by using the Assyrian king list, Jacobsen wants to date Hammurabi with "synchronisms with Egyptian chronology" (p. 193). But the Egyptian chronology is based on even more dubious evidence even though some modern writers think the Egyptian chronology is an accurate one because it is believed to be based on astronomical evidence (see "Egyptian Chronology," and "Astronomical Calculations").

cp79» Therefore the new date for Hammurabi is a reduction of 450 years. Courville in his *The Exodus Problem*, reduces Hammurabi's years even more to about 1411 - 1368 BC (p. 300). There is some evidence that he may be much later than 1750, that is some time after the Exodus. In *The Letters and Inscriptions of Hammurabi*, L.W. King, 1900, Vol III, page 12ff, it shows an order by Hammurabi to Sin-Idinnam ordering him to insert an intercalary month (a second Elul) in the calendar. There is some evidence that the year used to be 360 days before the Exodus and that an astronomical catastrophic event changed the year to the 365 1/4 day year either at the Exodus or much later than the Exodus (See "Catastrophic - Astronomical Events" in CP2 and "Astronomical Chaos" in CP3). The real time when Hammurabi lived I do not know, nor will I guess when Hammurabi lived.

## **Sumerian King List**

cp80» "The first fragment of the Sumerian King List of any importance was published by Hilprecht in 1906... As was natural, considering the fragmentary state of the material and the gradual way in which it accumulated, most of these studies were concerned primarily with the reconstruction of the text, the placing of the known fragments, and the filling up of gaps. The reliability of the information contained in the

fragments was rarely seriously questioned. Most scholars inclined to accept it at face value.." (*The Sumerian King List*, Thorkild Jacobsen, 1939, pp. 1-2).

**cp81»** But by 1923 there grew a wave of "rapidly growing skepticism." Studies showed that "several dynasties listed as consecutive in the King List must in reality have been contemporaneous ... so many kings who were to be expected in the King List are not mentioned there and that so many of the older rulers mentioned appear with unbelievably long reigns, center most of the comments on the King List after 1923" (pp. 2-3).

cp82» "In late years the study of the King List has come almost to a standstill, and its evidence is hardly ever used for purposes of chronology" (p. 4). "But our manuscripts of the King List give opportunity for such study only to a very limited degree. The majority are small fragments. It is therefore relatively seldom that many of them overlap, and passages common to several versions, where we might observe the spread of variants, are few" (p. 14). "The view which we have stated here (...), that our texts are copies, or copies of copies, of a single original document, seems to be generally held by scholars..." (footnote 31, p. 14).

Copyright (c) 1989, 1995, 2001, becomingone

# 3: Astronomical Calculations

**cp83**» And point (3), secular chronology before 626 BC cannot be relied on because it is based in part on an *apparent* solar eclipse that has been identified as the eclipse that was supposed to have occurred on June 15, 763 BC according to astronomical calculation, and based on other supposed eclipses.

(*Handbook of Biblical Chronology* [1964], Finegan, ¶ 159; "Radical Exodus Redating Fatally Flawed," by Baruch Halpern, *Biblical Archaeology Review*, Nov./Dec., 1987, footnote 1, p.61; see (2) above)

**cp84»** Although the reported 763 BC eclipse deals mostly with Assyrian chronology, this astronomical event is interrelated with other chronologies because of the king lists and the interplay of the Assyrian, Babylonian, Egyptian and other cultures. What applies to this so-called eclipse also applies to others used to prove other secular events and chronologies.

cp85» We need to examine what "astronomical calculation" is all about in order to understand why there is no real proof of secular chronology prior to 626 BC. Because of the finding of some astronomical cuneiform tablets dating after 626 BC, it is possible to verify some conventional dates after 626 BC. But this is not to say that secular chronology after 626 BC is entirely correct or mostly correct. It so happens that two astronomical cuneiform tablets dated after 626 BC (568 and 523 BC) help to prove the Biblical chronology and some of the conventional chronology (see CP3).

**cp86**» Some set their chronology by the calculation of past solar and/or lunar eclipses:

■ "For the year when Bur-Sagale, governor of Guzana, was eponym, the record states that there was a 'revolt in the city of Assur. In the month of Simanu an eclipse of the sun took place.' Astronomical computation has fixed this date as June 15, 763 B.C. This notation is of immeasurable value for Assyrian chronology, for the date of the eponymy of Bur-Sagale being established as 763 B.C., the year of every other name on the complete list can likewise be fixed. It is thus that we have absolutely reliable dates for each year of Assyrian history from 892 to 648 B.C" (Edwin R. Thiele, A Chronology of the Hebrew Kings, p. 29).

**cp87**» No wonder that those who lack the time to research such statements about the *certainty* of Thiele's chronology are positive that the present conventional chronology is the absolutely correct one because of

astronomical calculations it is based on. But the reason Thiele uses eclipses is because he wrongly thinks the Bible is mistaken in its chronology:

But as these Biblical numbers are examined, they appear to be in almost constant contradiction with each other, and it seems impossible to work out a harmonious pattern of reigns for either Judah or Israel that is in accord with the numbers in Kings or that agrees with the established chronology of ancient history" (p. 10, my emphasis).

**cp88**» At the end of chapter 1, Thiele tries to indicate that he does not really think the chronology of the Bible is wrong, but only misunderstood:

"In the pages to follow, the solutions to the various problems involved will be given. It will be shown that once the methods of chronological procedure employed by the early Hebrew recorders are understood, the data of synchronisms and lengths of reign can be woven together into a pattern of internal harmony that is in accord with the years of contemporary chronology at every point where a precise contact occurs" (p. 13).

cp89» In actual fact, Thiele thinks there are several parts of the Biblical chronology that are wrong and that is why he changes the natural flow of certain king's reigns such as Pekah's and Hoshea's (chap. 6 and 7) and disregards certain scripture as mistaken late calculations by editors of the Bible (chap 7). Thiele uses "overlapping reigns," "dual dating," and theories of "late calculation" by Biblical editors to make his theories fit and work with the Assyrian chronology. He mainly does this because he is mistakenly convinced of the infallibility of identifying dating through solar eclipses and the Assyrian kings list.

#### In Thiele's own words

**cp90»** From his book, *The Mysterious Numbers of the Hebrew Kings*, 1983:

- "If Biblical chronology seems to be at variance with Assyrian chronology, it may be because of errors in the Hebrew records" (p. 34).
- And, "Assyrian chronology back to the beginning of the ninth century B.C. rests on a highly dependable basis" (p. 67).

- And, "the chronologies of these two nations [Assyria & Neo-Babylonia], at least for the period with which we are most concerned, have been definitely established" (p. 67).
- "From some period very early in their history possibly from the very beginning of the kingdom to the end, the Assyrians followed the practice of each year appointing to the office of eponym, or limmu, some high official for a calendar year, and to that year was given the name of the individual then occupying the position of limmu. Historical events in Assyria were usually dated in terms of these limmus" (p. 68).
- "One item of unusual importance is a notice of an eclipse of the sun that took place in the month Simanu in the eponymy of Bur-Sagale. Astronomical computation has fixed this as 15 June 763. With the year of the eponymy of Bur-Sagale fixed at 763 B.C., the year of every other name of the complete canon can likewise be fixed. The Assyrian lists extant today provide a reliable record of the annual limmu officials from 891 to 648 B.C.; and for this period they provide reliable dates in Assyrian history" (p. 69).
- "Since Ptolemy's canon gives precise and absolutely dependable data concerning the chronology of a period beginning with 747 B.C., and since the Assyrian eponym canon carries us down to 648 B.C., it will be seen that there is a century where these two important chronological guides overlap and where they may be used as a check on each other" (p. 71).
- "When the student has at his disposal chronological materials so dependable as the assyrian eponym list and the ptolemaic canon, he may have complete assurance that he has a solid foundation on which to build" (P. 72).

What Thiele does not understand here is that the king list was *reconstructed* in order to reflect the Ptolemaic Canon (See cp38).

**cp91»** But in contradiction to this last clear statement, Thiele then goes on and argues concerning some contradictions within the eponym lists about the eponymy Balatu, whether he was an "extra eponymy" and if there was an "extra year" (p. 73). And Thiele goes on to raise further doubt about the Assyrian chronology:

- "A determination of the question of whether there were one or two eponyms during the year 786 and whether the longer or the shorter chronology is correct" (p. 74).
- "It is extremely rare, however, that an Assyrian inscription provides an account of every year without a gap. The eponym canon deals with every year, and a very few other inscriptions give annual reports; but the usual rule is many omissions in the record. Seldom is there any indication as to just how large or small a gap may be, whether many years or only a few" (p. 126).
- "The eponym Chronicle has been of invaluable service to scholars in their endeavor to fit properly together facts gleaned from other sources. But in spite of the splendid work that has already been done, it is admitted by careful historians that future study may indicate the necessity of making some modifications in results already achieved" (p. 143).

Copyright (c) 1989, 1995, 2

# **All About Eclipses**

**cp92**» Thiele's chronology and others like his are based in part on the calculation of past eclipses. But these apparent past eclipses and the calculation of them are a *weak* link in this established chronology.

#### Vagueness of Ecliptical Records

**cp93**» As just quoted from Thiele's paperback book (p. 29) there was an apparent eclipse when Bur-Sagale was eponym: "In the month of Simanu an eclipse of the sun took place." Or it can be translated as, "the sun was *obscured*" (*Pensee*, Fall 1973, p. 21). Although this may have been an eclipse, as to whether it was a total eclipse or partial we do not know.

**cp94**» Concerning the so-called eclipse of 763 BC Robert R. Newton writes:

"With regard to the magnitude, Fotheringham [1920] argues: 'As the eclipse is the only eclipse mentioned in this Chronicle, which covers an interval of 155 years, there can be no reasonable doubt that it had been reported as a total eclipse.' This is not a safe conclusion. Even in annals the recording of eclipses is highly variable, as Dubs [1938] has shown for Chinese records. Over a span of five centuries, the Anglo-Saxon Chronicles recorded six solar eclipses, of which one (809 Jul 16) was probably far from total. (During this time the Chronicles missed ten or more eclipses that must have been large if not total.) "[Ancient Astronomical Observations and the Accelerations of the Earth and Moon, by Robert R. Newton, 1970, p. 60]

What Newton is saying here is that chronicles that apparently mention eclipses do not necessarily give all of them, or even most of them, or even the larger ones of the chronicle's time period.

**cp95**» Most ancient so-called eclipses are not identified as total or partial. The following have been interpreted as eclipses:

- "in the seventh year the day was turned to night, and fire in the midst of heaven" (p. 58, Newton)
- "the sun has perished out of heaven" (p. 29, Mitchell's *Eclipses of the Sun*)
- "turned mid-day into night" (p. 29, Mitchell).

cp96» There is a great vagueness in ancient texts as regard to eclipses. If you could be sure that a reported eclipse was total, it would make it easier to find the year of the eclipse, but not easy, for in any century there are hundreds of eclipses.

#### cp97» Robert R. Newton writes:

"The total eclipse of the sun is a rare and spectacular event....

It is rare, of course, because the zone of totality is narrow, typically of the order of 100 km. The duration of totality at a particular point is of the order of 4<sup>m</sup>[minutes]. Thus a simple observation of totality, coupled with an observation of a place where totality occurred, is an astronomical observation of considerable accuracy. The time is needed only to identify the eclipse; an accuracy of a decade in reporting the time is enough in some cases. Unfortunately these simple ingredients of an accurate report are often missing.

Many eclipse reports are found in national annuals or chronicles that reported events of interest anywhere in the country. Sometimes the exact place can be recovered from the annals, often it cannot....

Some reports by an individual do not give the place....

In considering the accuracy of an observation of totality, one should note first that many reports simply state that an eclipse occurred, with no accompanying detail" (Newton, *Ancient Astronomical Observations* ..., 1970, p. 35-36).

cp98» Newton classified ancient observations of eclipses into one appearing in (a) technical reports, (b) annals and chronicles, (c) assimilated eclipses, (d) magical eclipses, and (e) literary eclipses. Newton says the "magical and literary eclipses can be put into a family that can be called myth" (p. 470). While assimilated eclipses are eclipses that were real but were mixed with the wrong time or place or another event. Eclipses found in ancient technical reports and annals may have "typographical errors" and authors of annals or chronicles may have dramatized the reported eclipses.

# Frequency of Eclipses

**cp99**» There is a possibility of as many as seven eclipses in a calendar year:

"five of the sun and two of the moon, or four of the sun and three of the moon. The smallest number possible is two—both of the sun" (*Astronomy*, by William T. Skilling and Robert S. Richardson, 1949, p. 249).

"Since eclipses of sun and moon are possible only when the sun is near one of the nodes of the moon's orbit, eclipses, in general, will occur at intervals of about 6 months. Since the lunar eclipse limits are smaller than the solar, it is possible that no eclipses of the moon will occur in any calendar year. Two solar eclipses must occur under these conditions, however. In this century there are 14 years when only two solar and no lunar eclipses take place. Under the most favorable circumstances there may be as many as seven eclipses, two of the moon and five of the sun or three of the moon and four of the sun, in any one year.... From A.D. 1901 to 2000 there will be a total of 375 eclipses, according to Oppolzer's 'Canon der Finsternisse,' 228 of the sun and 147 of the moon; an average of nearly four per year" (The Elements of Astronomy, by Edward Arthur Fath, 1944, pp. 166-167; see Theodor von Oppolzer, Canon of Eclipses, 1962, Dover reprint, or Oppolzer's 1887 work).

#### Saros versus Ecliptic Interval

**cp100**» Lunar and solar Eclipses repeat themselves every 18 years 10 1/3 days (6585.32 days), a period of time mistakenly called a saros.

"Another document to be considered under category A is the Eighteen-year Interval List. This is a list of eighteen-year intervals beginning with the seventh year of Nabonidus (549 B. C.) and ending with the 21th year of the Seleucid Era (99 B. C.) When first published, the nature of this document was misunderstood and it was incorrectly called the Saros Tablet. The mistaken interpretation of the text and its misnomer arose from a misunderstanding of the term saros. O. Neugebauer [The Exact Sciences in Antiquity, 1956] has shown that although Berossus used the term saros (from Sumerian sar) as a designation of a period of 3600 years, a later misunderstanding led to the erroneous conclusion that saros was the Babylonian designation for a period of 223 months (= 18 years + 10.8 days [Note: Grayson speaks here of the period of 19 returns of the sun to the same node, not 223 synodic months]). When the present tablet was first discovered and published by Pinches, Oppert immediately connected this list of eighteen-year intervals with the idea that saros was the Babylonian designation for an eighteenyear period. He claimed that this was a list of such periods

and called it the Saros Tablet. Since it is now known that saros is not a term for an eighteen-year period, this text cannot possibly be a Saros Tablet" (Grayson, *Assyrian and Babylonian Chronicles*, p. 195, col 2 to p. 196).

#### Series of Eclipses

**cp101»** An eclipse repeats itself every 18 years 10 1/3 days or 6585.32 days (Fath, p. 167). But this is the interval between two eclipses of the same series. Remember there can be as many as seven eclipses within a calendar year. There are series of eclipses:

"Each individual eclipse, whether of the sun or moon, belongs to a series.... Though an eclipse repeats itself only after eighteen years, there are several eclipses of some kind each year. This is because there are many series going on all the time; there are about 28 series of lunar eclipses, and 42 of solar. Thus there must be a total of about 70 eclipses in every 18 years, or nearly an average of four a year, including eclipses of both sun and moon" (Skilling & Richardson, *Astronomy*, 1949, p.249).

**cp102**» Because when a certain eclipse in a series repeats itself, it is 1/3 of a day past the position of the last eclipse, then the eclipse will appear on the earth:

"1/3 of the way around the earth to the west of where it came before. The earth has time to turn 1/3 of the way around (to the east) farther than it did before. But since an eclipse of the moon always covers at least half the earth, and the eclipse path of the sun may extend more than a third of the way around the earth, two successive eclipses will overlap each other. This makes it possible for a person favorably located to see two successive eclipses of the moon, and at least the partial phase of two successive solar eclipses. At each return the eclipse comes on the average about 180 miles north or south of its previous latitude. Half of the series work northward and half southward." [Note: This is because 19 returns of the sun to the same node is .46 of a day more than the moon's synodic period, 6585.78 days versus 6585.32 days (Fath p. 167). This causes the eclipse to fall "a little north or south of where it was before [6585.32 days earlier]. Whether it is farther north or farther south depends on whether the eclipse is at a descending node or at an ascending node" (Skilling, p. 251-252). ]

"At each third repetition of a solar eclipse, that is, once in 54 years, the longitude of the eclipse should be nearly the same that it was before, for the series would have traveled all the way around the earth in 54 years. That often [every 54 years] the partial phase, at least, of a solar eclipse should be seen in the same locality" (Skilling and Richardson, pp. 249-250).

cp103» Thus it is possible for an eclipse of the sun or moon (of specific series) to occur in approximately the same location as often as every 18 years for each series of eclipses, but more likely for the sun every 54 years. From a certain location, the repetition of a *full* solar eclipse will not occur every 18 years, and may not occur every 54 years because of the eclipse's north or southward movement of approximately 180 miles each synodic period.

# **Types of Eclipses**

#### Annular Eclipses

**cp104»** If the moon is in its apogee position (furthest distance from the center of the earth) as compared to its perigee position (nearest distance from the center of the earth), the eclipse of the sun will not in any case be a total eclipse, but an *annular eclipse*. In annular eclipses, the moon appears smaller than the sun, thus a ring, or annulus, of the sun's disk remains uncovered. "Annular eclipses are 20 percent more frequent than total eclipses" (Baker & Fredrick, *An Introduction to Astronomy*, 7th Ed., p. 194).

#### Partial and Total Eclipse

**cp105**» Of the solar eclipses during the 20th century only 28 percent were total, while 35 were partial and 33 percent annular. About 4 percent were annular-total (*Eclipse*, Bryan Brewer, p. 67).

#### Penumbral v. Umbral Eclipses

cp106» Furthermore some of the eclipses of the moon cannot be seen at all even in good weather because the eclipse is of the penumbral shadow and not the umbral shadow. The *umbral* shadow is the dense part of an eclipse shadow while the *penumbral* shadow is the less dense part of the shadow. In a recent eclipse of the moon, Oct 7, 1987, the only shadow cast on the moon was the penumbral shadow. Even though this is counted as an eclipse of the moon in such canon of eclipses as Jean Meeus and Hermann Mucke (1979), and even though I knew ahead of time when it was to occur,

I could not detect any shadow on the moon by eyesight. About 36 percent of all lunar eclipses from -2002 to +2526 will have been penumbral eclipses, according to calculations (*Canon of Lunar Eclipses, -2002 to +2526*, by Jean Meeus and Hermann Mucke, 1979, p. XIII).

#### **Observable Eclipses**

cp107» Most solar eclipses, except total ones, are not even noticeable to most people. A total eclipse only lasts about 4 minutes on average, at the very most 8 minutes. A penumbral eclipse of the moon is basically invisible, at most the color of the moon changes. A partial eclipse of the sun below 99 percent, or an annular eclipse of the sun is also basically invisible:

"We find that the overall partial p-type eclipses of Oppolzer were never noticed and even the annular r-type were often missed. Most of the early records relate to eclipses that were total, either at the place of observation or within a few hundred miles of the track of totality.... The total phase seldom lasts more than five and never more than eight minutes.... Long before totality commences, Venus is usually visible, but during totality, planets and a few stars may be seen.... Total eclipses are rare; at any one place the average is three times in a millennium.... The intensity of daylight may not be greatly reduced so that an annular eclipse may not even be noticed... Annular-total eclipses are classified with fully total eclipses as Central [but nevertheless are not easily noticed].... [concerning partial eclipses] Such eclipses are more frequent than is usually supposed, for they occur about once every  $2\frac{1}{2}$  years at any given location. However, the loss of light is smaller than heavy clouds would produce and partial eclipses usually passed unnoticed by the astronomically-unsophisticated chronicler.... Astronomers, and those who have been forewarned, may notice an eclipse of magnitude 0.70 [percent] (cf. AD 808) if they see it in a reflection, at sunset or through thin cloud or haze, and then the moon shaped black crescent suggests that a large bite is taken out of the Sun. The average person notices a thin solar crescent of a solar eclipse only when the magnitude reaches 0.99 [percent]" (D. Justin Schove, Chronology of Eclipses and Comets, [1984], pp. x-xv).

Lunar eclipses are visible whenever the moon is above the horizon to the observer and can be seen over more than half the earth during its duration. Umbral eclipses can last almost 4 hours, counting from when the moon's first contact with the umbra until the moon exits the umbral shadow. While the total shadow over the moon can last over1 hour and 40 minutes. For example, one of the longest total lunar eclipses ever occurred on January 30, 30 BC. It lasted 3 hours and 54 minutes (from first contact of the umbra to the last contact), while the total eclipse lasted about 1 hour and 42 minutes. This eclipse was seen in Jerusalem and in North America.

#### 'Average' Time Between Eclipses

cp108» Remember there are many *series* of eclipses going on in a 54 year period. This means full eclipses of the sun from *different* series of eclipses may be seen from the same position on the earth more often than every 54 years. In certain circumstances an eclipse can be seen within two years of the last eclipse. In the vicinity of the city of Halifax in Nova Scotia people were able to see two total solar eclipses; one in 1970 and one in 1972 (Baker and Fredrick, *An Introduction to Astronomy*, 1967, p.196). See chart called, "Important Solar Eclipses," p 253, *Astronomy*, by Skilling & Richardson, where it shows several solar eclipses visible in certain areas on the earth within different two or three year periods.

cp109» In Eclipse, by Bryan Brewer (1978, p. 70) we read:

"Partial phases of solar eclipses can be seen about every 2 ½ years from the same spot. The best estimate for total eclipses is to say they recur at the same location about every 360 years on the average. This figure is based on the average width of eclipse paths, the total surface area of the Earth, and the overall frequency of total eclipses. But the actual facts vary, sometimes widely, from this estimate. The table below helps illustrate the apparent random nature of the recurrence of eclipses at the same place. The examples were chosen, not to prove any lack of pattern, but to present the flavor of the variation involved."

ă			Consecutive
Location	Total Eclipses	Interval	Concocativo
London	Oct.29,878 AD to Apr.22,1	715 AD	= 837 years
Jerusalem 	Sep.30,1131 BC to July 4,336	BC	= 795 years
Southern	June 11,1983 A.D. to		
new Guillea	Nov.22,19	84 A.D.	= 1 ½ years
NO			





# **Identification Game**

cp110» All this above, especially since the ancient so-called eclipses are vague as to type or magnitude (partial to total), vague as to exact location, and vague as to time period makes it extremely difficult to identify the year of their occurrence. This enables chronologists (Ptolemy included) to play the "identification game."

cp111» The "identification game" is explained by Robert R. Newton in his *Ancient Astronomical Observations* (pp. 45-47). It is played by chronologists when they think they know the ancient writer or chronologist's approximate location, the approximate date within decades of the occurrence of the eclipse, and when they have a copy of solar charts in such works as *Oppolzer Canon* (1887). When they have this information they merely,

"identify the eclipse as the one with the greatest calculated magnitude." Then they use, "this possibility alone in using the eclipse to improve the astronomical constants or the accelerations." Thus, "they lead to a successful 'identification' for almost any set of times and places chosen at random. It is only necessary for there to be a modest uncertainty in either the time or place. Further, the calculated path of the 'identified' eclipse, by the rules of the game, passes close to some chosen point. Thus, if the 'eclipse' report is used to improve the constants that went into the eclipse computation, by making the calculated path go through the chosen point, it is almost guaranteed that the changes in the constants will be acceptably small" (R. Newton, p. 46).

**cp112»** An example of this identification game in process is shown in, *The Story of Eclipses* [1912], by George F. Chambers. Notice this game was played with the chronologically important 763 BC eclipse:

"The discovery to which I allude is a contemporary record on an Assyrian tablet of a solar eclipse which was seen at Nineveh about 24 years after the reputed date of Amos's prophecy. This tablet had been described by Dr. Hinckes in the British Museum *Report* for 1854, but its chronological importance had not then been realized. Sir H. Rawlinson speaks of the tablet as a record of or register of the annual archons at Nineveh. He says: — 'In the eighteenth year before the accession of Tiglath-Pileser there is a notice to the

following effect — 'In the month Sivan an eclipse of the Sun took place' and to mark the great importance of the event a line is drawn across the tablet, although no interruption takes place in the official order of the Eponyms. Here then we have notice of a solar eclipse which was visible at Nineveh ... and which we may presume to have been total from the prominence given to the record, and these are conditions which during a century before and after the era of Nabonassar are alone fulfilled by the eclipse which took place on June 15, 763.'

This record was submitted to Sir G.B. Airy and Mr J.R. Hind, and the circumstances of the eclipse were computed by the latter, by the aid of Hansen's Lunar Tables and Le Verrier's Solar Tables. The result, when plotted on a map, showed that the shadow line just missed the site of Nineveh, but that a very slight and unimportant deviation from the result of the Tables would bring the shadow over the city of Nineveh, where the eclipse was observed, and over Samaria, where it was predicted. The identification of this eclipse, both as regards it time and place, has also proved a matter of importance in the revision of Scripture chronology, by lowering, to the extent of 25 years, the reigns of the kings of Jewish monarchy" (Chambers, pp. 76-77).

cp113» Notice that even though the "shadow line" missed the site of Nineveh in the tables it was close enough for the "identification game" being played here. It is not clear to me what Chambers means by this "shadow line" in the table. By looking at the 1983 *Canon of Solar Eclipse* by Mucke and Meeus, page 685, it shows the shadow line representing the total eclipse missing the area of Nineveh, but at this site, if Mucke and Meeus' work is correct, people at or near Nineveh saw a solar eclipse that was approximately 95-99% total, if weather permitted the observation, and if the earth and planets were still in the same orbit as now. Remember, the eclipse was retro-calculated. There is evidence of catastrophic-astronomical events in the past. See "Catastrophic - Astronomical Events" in CP2 and "Astronomical Chaos" in CP3.

**cp114»** Airy was also responsible for the present identification of the eclipse of Thales of Miletus as happening on May 28, 585 B.C.:

"The exact date of this eclipse was long a matter of discussion, and eclipses which occurred in 610 B.C. and 593 B.C. were each thought at one time or another to have been the one referred to. The question was finally settled by the

late Sir G.B. Airy, after an exhaustive inquiry, in favour of the eclipse of 585 B.C. This date has the further advantage of harmonizing certain statements made by Cicero and Pliny as to its having happened in the 4th year of the 48th Olympiad" (Chambers, p. 94).

**cp115»** Airy method is the identification game method as is shown by how he identified other eclipses:

- "Sir G.B. Airy, having had his attention called to the matter, examined roughly all the eclipses which occurred during a period of 40 years, covering the supposed date implied by Xenophon. Having selected two, he computed them accurately but found them inapplicable. He then tried another (May 19, 557 B.C.) which he had previously passed over because he doubted its totality, and he had the great satisfaction of finding that the eclipse, though giving a small shadow, had been total, and that it had passed so near to Nimrud that there could be no doubt of its being the eclipse sought" (Chambers, p. 97).
- "The tables used by Baily were distinctly inferior to those now in use, and Sir G.B. Airy thought himself justified in saying that to obviate the discordance of 180 miles just referred to 'it is only necessary to suppose an error of 3 minutes in computed distances of the Sun and Moon at conjunction a very inconsiderable correction for a date anterior to the epoch of the tables by more than twenty-one centuries.' "(Chambers, pp 104-105)

cp116» Airy by just adjusting the computation a little comes up with what he wants. This is another dubious aspect of using eclipses to establish chronology — the present computation of ancient eclipses may or may not be correct. If the present computation of ancient eclipses is wrong a whole new can of worms is opened or a whole new area of dubiousness enters the picture. See F. Richard Stephenson, "Historical Eclipses," *Scientific American*, Oct. 1982, pp. 170ff, especially p. 180 top, for some information about the possibility of the sun shrinking, or earth spin slowing down and their effect on retro-calculation of past eclipses.

#### 1000 Years Difference

**cp117»** In Robert R. Newton's *Ancient Planetary Observations and the Validity of Ephemeris Time*, he shows us a swing of over 1000 years in the identification of a solar and lunar eclipse and other astronomical phenomena:

"Kugler published and discussed a text that he dates to the months IV through IX of the year 40 of Artaxerxes I (the year SE -113). The text makes statements about the number of days in each month, and about the dates of full moons, of first and last visabilities of the planets and of Sirius, of the summer solstice and the autumnal equinox, and of one lunar and one solar eclipse. It has been claimed that the statement about the lunar eclipse is a highly accurate and reliable observation of the lunar eclipse of -424 October 9, and much weight has been put upon this alleged observation. However, I do not see any reason to assume that the text contains an observation of a lunar eclipse at all.

I did not originate this conclusion. Kugler reached it in the cited reference sixty years ago, and he emphasized it at least two places that the text contains no observation, but only calculations" (pp 127-128).

"It is interesting that Kugler used the word 'alleged' in referring to these records, just as I have done, but for a different reason. He referred, in the caption of his relevant section, to alleged records from the middle of the second millennium before Christ'. The text in its present form has no indication of year, and students before Kugler had assigned it to a year near -1500. Kugler assigned the year SE -113 [-424] from an analysis of the astronomical information in the text" (p. 130).

Notice that Kugler assigned the year -424 because of his analysis of the astronomical information in the text, but students before him for the same reasons assigned it to a year around -1500. The "identification game" is very liberal. What is a 1000 years or so?

#### **Calculations versus Observations**

cp118» In summarizing this same cuneiform text Robert Newton writes:

"In summary, if the year is SE -113 [425 BC], it is certain that at least one of the eclipse records in the text is calculated, and there are various reasons to conclude that all records in the text are calculated. If the year is not SE -113, it is mathematically possible that both eclipse records represent observations. In either case, however, there is no basis for the assumption that the text records an observation of the lunar eclipse of -424 [425 BC] October 9. If the year is right, we are dealing with calculations and not observations. If the year is wrong, we are not dealing with the date -424 October 9 at all" (p. 130).

cp119» So Newton is not even sure about the present identification of the text. Newton also brings up that many of the cuneiform text of astronomical events were calculations and not observations. This makes it even more difficult to use astronomical calculations to prove chronology.

#### Identification Game, More on the

**cp120»** Lynn E. Rose put the same identification game into the following words:

"Let us now turn to the general context within which the received opinions about such matter as intercalation have developed. Over the years there has been a close cooperation between Assyriologists and astronomers. The interpretation of texts has been carefully guided by astronomical retrocalculation, in accordance with uniformitarian principles. *The Venus Tablets of Ammizaduga* (London, 1928) is a microcosmic replica of the sort of cooperation that has pervaded scholarship generally: Langdon was an Assyriologist, Fotheringham was an astronomer, and Schoch was a mathematician, concentrating here on tables to facilitate astronomical retrocalculation.

... A historian may consult an astronomer regarding an eclipse or other astronomical event. The astronomer will calculate possible dates for the event. The historian will then arrange his chronology so as to fit the astronomer's retrocalculations. Then some time passes, and the chronology becomes orthodox. The grounds for the chronology are forgotten, and it is *assumed* to rest on solid historical

evidence. No one remembers or can even find out any more that it rests on astronomical retrocalculations. Then a new generation of astronomers and historians play the game again, this time in reverse direction. The chronology is taken as independently fixed, and the eclipse or other event is taken as datable on purely historical grounds. Then someone retrocalculates in the same manner as before, but not in order to set up the chronology this time — just to check it. And of course all the pieces fit. Different generations have made the same numerical computations and obtained the same results" (*Kronos:A Journal of Interdisciplinary Synthesis*, Vol IV, No. 2, Winter 1978, "Just Plainly Wrong: A Critique of Peter Huber," by Lynn E. Rose, p. 39).

**cp121»** This quote is from Rose's critique of Peter Huber. It is interesting to quote from Peter Huber concerning the matter of the observation of Venus:

"4.3 The Old Babylonian Venus observations

Apart from minimal changes (to be mentioned below) we followed the text established by E. Reiner and D. Pingree, *The Venus Tablet of Ammisaduqa...* 

#### 4.3.1. Data screening

To avoid possible misunderstandings, I must present the analysis of these very poor data in considerable detail. As a rule, apparent gross errors and conjectural emendations were included in the astronomical calculations, but otherwise treated like missing values and excluded from statistical tests. However, I struggled with the Venus Tablet data long enough so that the treatment is not wholly consistent between calculations I did seven years ago (i.e. before RP) or more recently.

The text contains dates of 49 distinct phenomena; if it ever was complete, it covered 52. The data set is the worst I ever have encountered as a statistician. From the number of internal inconsistencies (between dates of disappearance and reappearance and the stated duration of invisibility) and of discrepancies between duplicates, one may guess that at least 20 % to 40 % of the dates must be grossly wrong. This entails that we must perform some data screening to eliminate the clearly wrong values, ...

It should be emphasized that this screening is independent of chronological assumptions.... Among them, we shall throw out groups which seem to be affected by a common pattern of errors, for example the entire last section of the text, which seems to be more corrupt than the rest" (Peter Huber, *Astronomical Dating of Babylon I and Ur III* [June 1982], pp. 14-15).

**cp122**» Huber tries to assure us that he did not ignore or screen some of the text for chronological assumptions. But he writes a few pages later:

"At least 5 of these 8 dates give a poor fit for any chronology fitting the majority of the data. One may wonder whether they belong to Ammisaduqa at all.... Anyway, we cannot gain much by keeping this section in, so we may just as well stay on the safe side and drop it entirely.

...

This date agrees so poorly with any chronology fitting the majority of the data (it is several days too late) that I decided to drop it, ....

After establishing a particular chronology we may go back and check also the rest of the data against calculation" (Huber, p 19).

cp123» By reading this work by Huber it is obvious that he is changing data to fit chronological assumptions. Huber uses the Venus Tablet as some use the Bible, if the data or scriptures don't fit their assumptions, they change the data or scriptures — "scribal error." One reason the data of the Venus Tablet doesn't fit today's observation of Venus is because Venus may have orbited at that time in a different path and the data in the Venus Tablet was a recording of that different path (see "Astronomical Chaos," CP3).

### Suppression of an Eclipse

**cp124»** Another example of the identification game and of data screening is the blatant ignorance of the eclipse mentioned in the so-called Esarhaddon Chronicle. On the obverse (front) of the clay tablet it reads on the 5th line:

"In the month of Teshri [Sept - Oct] the sun darkened [its] light."

**cp125»** This is quoted from the English translation found in Sidney Smith's *Babylonian Historical Texts*, page 14. In the "Notes" for this tablet Smith has a footnote for line 5:

"Sir Frank Watson Dyson, the Astronomer Royal, has kindly informed me that there were three eclipses in 680 B.C., of which only the first could possibly be visible at Babylon; but since this eclipse fell on January 1, 680 B.C. according to the Julian Calendar, this cannot be the phenomenon referred to in the text, which is dealing with September-October. The expression therefore refers to some other phenomenon" (p. 16).

cp126» Line 5 of the obverse side of the tablet indicates a solar eclipse in the first year of Esarhaddon just as clearly as any other note of an eclipse in ancient writings. Of course like the rest of the so-called eclipses mentioned in ancient writings it does not indicate a total or partial eclipse. The only reason, repeat, the *only* reason this apparent eclipse is not used to confirm conventional chronology is because it would not confirm it, but disprove it. Thus the words that expressed that the sun was darkened in the first year of Esarhaddon must therefore refer "to some other phenomenon." When an eclipse in ancient writings confirms the conventional chronology it is an eclipse; when it doesn't it of course is "some other phenomenon." What this tells us is that there is something wrong with the conventional chronology. It is not based on sound thinking or on a solid foundation.

#### In Conclusion

**cp127**» Astronomical methods for dating ancient events are not as sure as some say they are:

- (A) Present secular and "Biblical" chronologies are based on vague evidence and these chronologies are at variance with the chronology of the Bible and that is why some have "corrected" the Biblical chronology so that it would agree with the Assyrian data and an alleged eclipse of 763 BC.
- **(B)** There is a vagueness to the records of eclipses, "The principle reason is the paucity [or shortage] of examples of eclipse records which provide adequate data for unequivocal identification of the eclipse record with a calculated eclipse. There is thus always the possibility that the eclipse record has been correlated with the wrong eclipse, thus leading to obscuring the truth rather than establishing it" (p. 201, Creation Research Society Quarterly, Vol 12, Number 4, "The Use and Abuse of Astronomy in Dating," by Donovan A. Courville).
- **(C)** "A second factor limiting the value of this method for dating purposes is the fact that only *major* eclipses have any genuine potential for dating. Partial eclipses are of such frequency that the chances for proper correlation are remote, thus leading to erroneous conclusions. Even a total or near total eclipse of the sun can be expected to have occurred within any period of a century or less in a given area" (Courville, p. 201).

#### **Catastrophic-Astronomical Events**

cp128» Also, if Velikovsky-like theories of catastrophic events in our solar system in the past are correct, the position of the earth may have been moved in relation to the Sun and Moon in the year -687 and -747 (Velikovsky's dates, but see Sean Mewhinney, "On 'The Year -687'," and "Velikovsky, Mars, and the Eighth Century," *Kronos*, VI:4 [1981] & XII:1 [1987]). This would make calculations before approximately -687 incorrect as far as finding occurrences of eclipses (see Velikovsky, *Worlds in Collision*; see "Astronomical Chaos," CP3). This may be the reason the eclipse of 763 BC gives a false reading and that the suppressed eclipse of the Esarhaddon Chronicle has not found a place in secular chronology. If there were astronomical catastrophic events near -747 and -687, then the solar system before these events would

not conform to the present arrangement and thus retrocalculation would not locate a correct date for old eclipses recorded in such old texts as the Assyrian eponym lists.

**cp129**» Some proof that the solar system changed positions some time between -747 and -687 (Vel. dates) is that about this time Babylon began to gather observation of positions of planets once again.

cp130» Kugler in a later part of his *Sternkunde und Sterndienst in Babel*, had a chapter entitled "Positive Proofs for the Absence of a Scientific Astronomy before the Eighth Century B.C." "These proofs consist of the fact that one finds that after this date Mesopotamian astronomers were concerned with calculating basic data that should have been known for a long time to those who pursue scientific astronomy. They were trying to ascertain such elementary matters as the exact location of the spring equinox and the system of intercalations necessary to obtain a calendar corresponding to the solar year. Furthermore, they would have just begun to keep accurate record of the eclipses... the Chinese record begins at the same moment of time. Kugler observed also that, although the planets had been identified as such for at least one thousand or two thousand years, in the seventh century B.C. the science of planetary motions seems to have been at its very beginning" (Livio C. Stecchini, "Astronomical Theory and Historical Data," *The Velikovsky Affair*, 1967, p. 157).

According to Parker and Dubberstein (Babylonian Chronology):

"Reconstruction before 626 is much too hazardous at present and must await further additions to our knowledge" (p. 2 of the 1956 edition).

## Review of Secular Chronology Before 626 BC

cp131» If one believes the Bible is the Word of God, then number (1) above [cp27] by itself would disprove any secular chronology before 626 BC that is based on Assyrian chronology that contradicts Biblical evidence because the Bible cannot err (John 10:35). The Bible to Christians is "profitable for doctrine, for reproof, for correction, for instruction" (2 Tim 3:16). Of course to others, number (1) [cp27] above would mean little. The dubiousness shown in numbers (2) [cp38] and (3) [cp83] above also shows us the unreliability of secular chronology before 626 BC as presently reconstructed from Assyrian eponyms and king lists. The presently accepted chronologies before 626 BC are highly suspect and I believe wrong.

# Secular Dates from 626 BC to 75 AD

cp132» At one time I thought that the dates of secular history, specifically from 626 BC to 75 AD (conventional dating system), were sound dates because of the apparent evidence shown in the book, *Babylonian Chronology 626 B.C.-A.D. 75* (1956), by Parker and Dubberstein. This book (or one of its earlier versions) is one of the primary books used by chronologists and historians to confirm their dates.

(for example see: A.T. Olmstead, *History of the Persian Empire*, footnotes on pp. 35, 87, 93, etc; D.J. Wiseman, *Nebuchadrezzar and Babylon*, footnotes on pp. 113, 118; D.J. Wiseman, *Chronicles of Chaldaean Kings*, footnotes on pp. 7, 38, 43; John C. Whitcomb, Jr., *Darius The Mede*, footnote on p. 74; Peter J. Huber, *Astronomical Dating of Babylon I and Ur III*, pp. 8, 51)

cp133» But notice what was the basis for this book's chronology:

"The general basis for the chronology of the period here treated is furnished by the **Ptolemaic Canon**, with help from classical sources. Cuneiform chronicles and lists of kings have also been of considerable help in checking and improving on the general framework of chronology. The numerous cuneiform economic texts often furnish an accurate check on the lengths of reigns. Since these texts cover the larger part of the period, from 626 B.C. to the middle of the second century B.C., they are of prime importance. Dates from cuneiform astronomical texts are especially helpful for the chronology of the third and second centuries B.C."

(Parker and Dubberstein, p. 10, my emphasis; also see *The Cambridge Ancient History*, Vol I [1923], p. 149 and *The History of Babylonia and Assyria*, 2nd Ed. Vol 1 [1901], p.324)

**cp134»** Notice the *basis* for the chronology of the period 626 B.C.- 75 A.D. is the Ptolemaic Canon. This canon, called the Royal Canon by Bickerman, is the foundation of ancient chronology for these years (*Chronology of the Ancient World*, pp. 81ff). As we shall see, this is one problem with secular chronology. I have found other problems.

# cp135» The problems I found with Parker and Dubberstein's book and its documentation were:

- (1) the Ptolemaic Canon itself;
- (2) juggling of the economic text tablets from one king's reign to another;
- (3) reading or projecting or interpolating dates into clay tablets, or suppressing evidence;
- **(4)** and there are about 77 years where there is no cuneiform evidence for the reigns of the later and supposed kings of Persia (Artaxerxes II, Artaxerxes III, Arses, and Darius III).



# 1: Ptolemaic Canon

cp136» The Ptolemaic **Canon** or Chronology is the work of one man Claudius Ptolemaeus (about 70-161 AD). He was the author of the Ptolemaic System of Astronomy. This is the system where the earth is stationary and all the heavenly bodies rotate around the earth. This theory was king for nearly a millennium and a half. This astronomical system was replaced by the Copernican system in about the 16th Century and thereafter. Ptolemy was apparently also one of the founders of the science of Geography.

cp137» Ptolemy's Canon or Chronology is merely a canon or list of kings with the years of their reigns that was included in his "Handy Tables" (Ptolemy's Almagest, 1984, G.J. Toomer, pp. 10-11). It had no explanatory writing with the list to explain the reasons Ptolemy put the list in its form. There is even some contention that the list or Canon was compiled after Ptolemy's death by someone else who then included it with Ptolemy's

#### **Canon of Ptolemy**

<i>Babylon</i> Nabonassar (Nabonassaros)	14 yrs
[747-734 B.C.] Nabu-nadinzir (Nadius) Ukinzer, Pulu (Chinziros, Poros) Ululai (Iloulaios) Marduk-appal-iddin (Mardokempados)	2 5 5
First Interregnum Bel-ibni (Belibos) Assur-nadin-shum (Aparanadios Nergal-ushezib (Regebelos) Mushezib-Marduk (Mesesimordakos) Second Interregnum Ashur-akh-iddin (Asaridinos)	12 2 3 6 1 4 8
Shamash-shum-ukin (Saosdouchinos) Kandalanu (Kineladanos) Nabopolaassar (Nabopolassaros) Nebuchadnezzar (Nabocolassaros) Amel-Marduk (Illaoroudamos) Nergal-shar-usur (Nerigasolassaros) Nabonidus (Nabonadios) [554-539 B.C.]	13 20 22 21 43 2 4 17
Persia Cyrus [538-530 B.C.] Cambyses Darius I Xerxes Artaxerxes I Darius II Artaxerxes II Ochus [Artaxerxes III] Arses Darius III [335-332 B.C.]	9 8 36 21 41 19 46 21 2

Note: Years are Egyptian years which began on the first of Thoth. B.C. dates are contemporary dates — some are wrong. (list is from E. R. Thiele, The Mysterious Numbers of the Hebrew Kings, 1983, Appendix G; and Martin Anstey, Chronology of the Old Testament, 1973 reprint, p. 21, which was taken from Tables Chronologiques des Regnes de C. Ptolemaeus, Theon, etc. par M. L'Abbe Halma, published in Paris, 1819; also see Toomer's Ptolemy's Almagest, p. 11 and E.J. Bickerman, Chronology of the Ancient World, pp. 107ff, and note 64 on p. 104; F.K Ginzel, Handbuch Der Mathematischen Und Technischen, 1906, p. 139)

work, or it was a "list of kings preserved in Theon's [of Alexandria] commentary on Ptolemy's astronomical work. Composed by Alexandrian astronomers for their own calculations" (Bickerman, p. 81ff).

**cp138**» Ptolemy wrote his list as a late compiler, not as a contemporary historian of the Persian and Babylonian Empire. He is corroborated by *some* evidence found in the book, *Babylonian Chronology 626 B.C. - A.D.* 75, but there are approximately 77 years wherein there are *NO* economic clay tablets (see below).

**cp139**» He is contradicted by Persian national traditions preserved by *Firdausi* (about 931-1020 A.D.), by the Jewish national traditions preserved in the *Sedar Olam Rabbah*, and by the writings of *Josephus* (see *Chronology of the Old Testament*, by Martin Anstey, pp 18-19ff).

#### Ptolemy's Fraud

**cp140»** In the last several decades Ptolemy has come under some close scrutiny by Robert R. Newton and others. From Newton's *The Crime of Claudius Ptolemy*, 1977:

- "It is possible that Ptolemy has deceived us about what Hipparchus did; we shall find in later chapters that he frequently deceives us about the work of other astronomers" (p. 99).
- "Even if there are such sources, they cannot explain how Ptolemy, by accident, over and over again, happened to make just those errors which allow his erroneous theories to agree with preassigned values, namely values that were accepted from the work of earlier astronomers" (p. 101).
- "In Chapter V. 12 he describes in considerable detail how he built an instrument for measuring the parallax of the moon, how he put it in place and aligned it correctly, and how he made observations with it.... But we showed in Section VIII.5 that Ptolemy did not make this observation at all.... To put the matter bluntly, Ptolemy lies about what he has done, and his elaborate description of his procedures is false. Presumably he inserts the description of the parallactic instrument only to provide convincing detail that will make us think that he did make the claimed observation. I do not know of any principles of science or philosophy, ancient or modern, that justify such conduct" (p. 352).

- "In Chapter VII.4 of the *Syntaxis* [Almagest], Ptolemy says that he has measured the coordinates of all the stars that it is possible to observe, down to stars of the sixth magnitude. He identifies the instrument with which he made the measurements, he describes the procedure that was followed, and he presents the alleged results in his star catalogue. However, we proved in Chapter IX above that the coordinates were not obtained by measurement at all. They were not obtained with the instrument that Ptolemy claims to have used, they were not obtained by the method that he claims to have used, and they were not obtained by any other instrument or procedure of observation. They were fabricated, and Ptolemy lied about what he did" (p. 353).
- "Ptolemy chooses the worst way rather than the best way to get the apparent diameters of the sun and moon" (p. 360).
- "In several places, Ptolemy measures or pretends to measure the same quantity more than once. In spite of this he does not seem to understand the significance of measurement error. We see this because Ptolemy's repeated 'measurements' always agree with almost impossible accuracy" (p. 361).
- "However, Ptolemy does not do this, as we have seen. Instead, he fabricates data in an attempt to make his defective theory seem correct" (p. 362).
- "Since the time of Copernicus, many writers including myself have used Ptolemy's fabricated material in studying the accelerations of the sun, the moon, and the planets. All this work must now be redone" (p. 366).

cp141» You have to study Newton's books and papers to understand why Newton is so angry with Ptolemy. At first Newton did not believe Ptolemy was a fake or a fraud, but someone who just may have fudged his figures a little to prove or explain his "earth is the center of the universe." At first Newton trusted many of Ptolemy's so-called observations and reports of other's observations, but as time went by Newton rejected all of Ptolemy's so-called observations. The more Newton studied Ptolemy the more he saw that Ptolemy was a fake and not even a fair astronomer:

The best we can say for him, it seems to me, is that he was mediocre. In view of the summary above, I believe that most

readers will have serious reservations about Ptolemy's capacity as an astronomer" (p. 364).

- "Several colleagues with whom I have discussed this work have asked what could be the motive for Ptolemy's fraud....

  Another is probably the most likely: Ptolemy wanted to be known as a great astronomer, perhaps as the greatest of all time. He may have found, early in his career, that he did not have the qualifications, and so he turned to the only remaining way of satisfying his ambition, which was to replace ability by fraud" (p. 376).
- "If the *Syntaxis* had not been written, we can be sure that much valid Greek astronomy now lost would have been preserved directly.

In other words, we do not owe Ptolemy our thanks for the small amount of earlier astronomy that he has preserved. Instead, we owe him our condemnation for the large amount of genuine astronomy that he has caused us to lose....

We can no longer accept as evidence anything Ptolemy says unless we have independent confirmation, and historians must now confront the task of identifying all historical material that rests upon the unsupported word of Ptolemy. At a guess, the realization of Ptolemy's fraud destroys half of what we have been accepting as Greek astronomy.

There are many examples of the damage that Ptolemy has done to astronomy by his fabricated data. Because he accepted the observations that Ptolemy used, and because he thus had to reconcile these data with genuine data, *Copernicus* [1543] had to make his heliocentric theory much more complicated than it needed to be.... Since the time of Copernicus, many writers including myself have used Ptolemy's fabricated material in studying the accelerations of the sun, the moon, and the planets. All this work must now be redone" (pp. 365-366).

cp142» Even G.J. Toomer who recently translated Ptolemy's Almagest into English (Pub. 1984) wrote about Ptolemy's "manipulation" of his computations and so-called observations:

"In the course of making the translation I recomputed all the numerical results in the text, and all the tables... The main purpose of this was to detect scribal errors... But my

calculations incidentally revealed a number of computing errors or distortions committed by Ptolemy himself.... I have noted every computing error of a significant amount, and also those cases where the rounding errors are not random, but seem directed towards obtaining some 'neat' result. I hope that this will shed some light on the problem of Ptolemy's manipulation of his material (both computational and observational).." (*Ptolemy's Almagest*, 1984, p. viii).

cp143» Toomer admits, in a roundabout way, that he too found errors that were not random (meaning they were systematic) in both Ptolemy's computations and observations. But he merely calls them "interesting" and protests that Newton's work "tends to bring the whole topic into disrepute" (p. viii). But Newton has good cause to call a spade a spade, or a fraud a fraud: because Ptolemy has done great damage to astronomy. And Toomer has cause not to call a fraud a fraud: because he has spent a great deal of time and energy on his new translation of Ptolemy's *Almagest*. From all appearances Toomer has done a great job on this book: it reads well and it is full of helpful notes and aids. But because of the seriousness of Ptolemy's crime, Newton had just cause to harshly criticize him.

#### **Ptolemy and Chronology**

cp144» Ptolemy's work "has been used extensively in two areas of chronology" (Newton, 1977, p. 371). One area has to do with the Athenian calendar, "all seven observations are fabricated. This fact does not in itself mean that the equivalent Athenian and Egyptian dates are incorrect, but it does not give us confidence in the situation.... We cannot accept any statement in the *Syntaxis* [Almagest] as evidence. We can accept only those statements that have confirmation from independent sources, and this means that we are not using the *Syntaxis* itself; we are using only independent sources.... This means that all studies of the Athenian calendar which have been based in whole or in part upon the *Syntaxis* must be redone, so that their dependence upon it can be removed" (p. 372)

**cp145»** (This is the only way I use Ptolemy's work — only with other independent confirmation.)

#### No Babylon Calendar Dates

**cp146»** Furthermore, Ptolemy's work is also used extensively for the Babylonian chronology. But notice what Newton manifests about Ptolemy's use of Babylonian dates and chronology. Ptolemy's reports of Babylonian observations are suspicious:

"Ptolemy says that he has a copious collection of astronomical observations made in Babylon.... Ptolemy states the dates of seven lunar eclipses with the aid of the Babylonian kings. However, as we point out in Appendix C, he never gives any more of the Babylonian date than the year. This contrasts strongly with his treatment of other calendars. In dealing with any other calendar, Ptolemy gives the full date in that calendar, and he then gives the equivalent in the Egyptian calendar. The exceptions are so few that they can easily be accidental.

His practice with regard to the Babylonian calendar does not arise from defects in the Babylonian records. In all Babylonian astronomical records that I have examined, the year, month, and day are all stated. However... there is a peculiarity about the Babylonian calendar which is not shared by other calendars.... If one has the Babylonian date of a lunar eclipse in the Babylonian calendar, it is easy to find the Egyptian (or Julian) date if one has the list of kings. The converse is not true. If one has the Egyptian date of a lunar eclipse, one can determine the Babylonian year from the king list. [but not the month or day because of the nature of the Babylonian lunar-solar calendar] ...

Let us see how Ptolemy would go about fabricating a Babylonian record of a lunar eclipse. He would start by determining the Egyptian date of an eclipse that he wants to use, and he would then fabricate the exact circumstances (magnitude and hour) as he wants them. It is important to realize that his process gives the date of an actual eclipse, and that the fabricated circumstances are fairly close to the truth. He then wants to give the date in the Babylonian calendar, but he cannot for the reasons that have been outlined. All he can give is the Babylonian year.

#### Calculations Does Not Authenticate King's List

cp147» [Continuing quote from Newton]

It is also important to realize that Ptolemy does not need an authentic king list in order to give a year in the Babylonian fashion. Even if his king list is fabricated, he can still use it in order to assign a specific year of a specific king to his fabricated eclipse record.

Now let us see what happens to a modern historian or chronologist who studies Ptolemy's eclipse records. He sees that Ptolemy dates a lunar eclipse in the first year of Mardokempad, for example, on a certain month and day in the Egyptian calendar, at a certain hour on that day, and he states the fraction of the moon that was shadowed during the eclipse. The historian uses Ptolemy's king list to find the year in our calendar and he uses the Egyptian month and day to find the complete date in our calendar. He then finds by astronomical calculations that there was an eclipse on that date, that it came close to the hour that Ptolemy states, and that the stated amount of shadowing is also close to correct. This agreement between Ptolemy and modern astronomy happens not just once but seven times.

The historian or chronologist naturally concludes that there is overwhelming evidence confirming the accuracy of Ptolemy's king list, and he proceeds to use it as the basis for Babylonian chronology. Yet there is no evidence at all. The key point is that there may have been no Babylonian record at all. Ptolemy certainly fabricated many of the aspects of the lunar eclipses, and he may have fabricated all of them. When he fabricated them, it did not matter whether he used a correct king list or not. Any king list he used, regardless of its accuracy, would seem to be verified by eclipses.

For example, according to Ptolemy's king list, Ilulaeus reigned for 5 years and his successor Mardokempad reigned for 12. Suppose that Ptolemy's list had omitted Mardokempad but assigned 17 years to Ilulaeus. Instead of putting an eclipse in the 1st year of Mardokempad, Ptolemy would put the same eclipse in the 6th year of Ilulaaeus. From the altered list, we would still establish that the eclipse was

on -720 March 19, and we would still have the same apparent verification of the king list.

It follows that Ptolemy's king list is useless in the study of chronology, and that it must be ignored. What is worse, much Babylonian chronology is based upon Ptolemy's king list. All relevant chronology must now be reviewed and all dependence upon Ptolemy's list must be removed" (Newton, 1977, pp. 372-375, my ephasis).

cp148» Newton goes on to say that "the later part of his king list has independent verification" because two cuneiform tablets have been found that help to confirm the years of Nebuchadnezzar down to Darius in 522 BC. See CP3 of this paper where I discuss this evidence.

**cp149»** What we are showing you here is the dubiousness of Ptolemy's chronology or king list. I did not follow blindly his list because of the dubiousness of the list. I relied on independent evidence, especially cuneiform tablets that I have studied (see CP3).

#### Ptolemy's Eclipses: Calculated not Observed

cp150» As just partially documented above, in *The Crime of Claudius Ptolemy* (1977), R.R. Newton writes of Ptolemy fabricating data of so-called ecliptic observations, as far back as the 8th century B.C. Ptolemy used calculations rather than observation for his reported eclipses. Toomer and others disagreed on Newton's strong wording about Ptolemy's shortcomings. But even Toomer agrees that Ptolemy may have fudged on his figures. And Newton in his works definitely gives good evidence that Ptolemy cheated. However, D. Justin Schove in his *Chronology of Eclipses and Comets* says Newton, even if right, doesn't negate Ptolemy's work and that his canon and eclipses may still be good for *historical* dating:

The genuineness of the observations reported by Ptolemy has long been suspect. R.R. Newton (The Origins of Ptolemy's Astronomical Parameters, 1982 ...) has examined the matter in detail. He concludes that Ptolemy 'fudged' the observations of the last three eclipses, passing off calculated quantities as observed quantities. However, this investigation, like earlier ones, is concerned with errors of minutes of time; the days and nights remain as we have stated them. Since the times given by Ptolemy, whatever their origin, seem never to be found more than 50 minutes in error, they are as accurate as any times one could hope for from a chronicler at this period,

and their chronological usefulness is hardly affected at all" (p. 27; also see above, "Ptolemy's Chronology").

We already quoted from Newton disproof of Schove's idea (See cp147, "Calculations Does Not Authenticate King's List").

cp151» "For the purposes of the present work, what matters mainly is that the dates are certain (having been confirmed by the calculations of numerous astronomers down the ages)..." (p. 25). Notice these dates or observations are "confirmed by the calculations." Some of Ptolemy's data are only minutes away from modern retrocalculation, but some are 28 hours away and even *weeks* away (see Newton, [1977], pp. 87, 95, etc.; Toomer, pp. 138, 469). And some like the 721 and 720 BC eclipses reported by Ptolemy may never have occurred because the earth may have changed its course since then (see CP3, "Astronomical Chaos"). In Newton's study he has found that Ptolemy's older eclipses are questionable, and most if not all were "fabricated" (Newton, 1977, p. 344-345).

#### **Newton v. Thiele**

**cp152»** Edwin R. Thiele disagrees with Newton and calls Newton's criticism of Ptolemy a "vicious attack" (*The Mysterious Numbers of the Hebrew Kings*, 1983, p.72, footnote #14). Thiele, as we have seen previously, is an author of a chronological system that attempts to synthesize secular and Biblical chronologies, but in fact he changes and "corrects" the Biblical chronology. Thiele thinks he needs Ptolemy to be correct, or his chronology falls apart. This is one reason Thiele calls Newton's critique of Ptolemy a "vicious attack."

**cp153**» The following examples in (2), (3), and (4) were taken from *Babylonian Chronology* (1971 printing) unless otherwise noted.

# 2: Juggling of Economic Texts

cp154» *Juggling of economic texts* from one king to another or one year to another is an additional problem for secular chronology for the period 626 BC to 75 AD:

- (A) "There remains some question as to whether or not this tablet is correctly placed, as the king's name is not mentioned.." (p. 4, footnote #9).
- **(B)** "¹¹A broken text ... Kugler, *SSB* II 418, argued that on the basis of elimination this text probably belongs to Nebuchadnezzar; other possibilities were Xerxes, Artaxerxes I, or Artaxerxes II... Since the Addaru II attributed to Xerxes' 5th year in our first edition is now known to belong instead to the 5th year of Artaxerxes I (see below), the present text can fit very nicely in the 4th year of Xerxes, and we have transferred it there" (p. 4-5, footnote 10).
- **(C)** "No king given, but tablet apparently belongs here" (p. 5).
- **(D)** "<sup>16</sup>This text was first assigned to Xerxes by Dr. Cameron, but after further study he gives it to Artaxerxes I on the basis of content and seal impression" (p. 8, footnote 16).
- **(E)** "4 We have no published cuneiform records from Alexander the Great; those formerly so attributed come from the reign of his son of the same name." (p. 19, footnote 4, quoted by Parker and Dubberstein from Olmstead, *Classical Philology*, 1937)
- **(F)** "The dates given by Strassmaier in ZA, IV, pp. 145ff ... and in his *Nabuchodonosor*, No.1 (B.M. 75321), where he reads *ITU.SU*, are wrong for in each case *ITU.DU* is written clearly. This error has resulted in the latter text being wrongly assigned to Nebuchadrezzar III.." (*Chronicles of Chaldaean Kings*, p. 85, note for line 11 of B.M. 21946).

# 3: Reading Dates into Clay Tablets

**cp155»** *Reading dates into the clay tablets* and suppressing or changing evidence is a third problem with secular chronology:

- **(A)** "Broken date read as 11th year by Kruckmann, but must be read 12th on basis of known materials" (p. 7).
- **(B)** "Broken date ... must be read as '3' on basis of known intercalated months" (p. 7).
- **(C)** "By addition of one wedge the year may be read either as '3' or as '12,' or by omission of one wedge it may be read as '1.' Error of either scribe or copyist is evident. Reading as '3' seems preferable to us" (p. 7, footnote 12).
- **(D)** "Possible dates for this letter are year 2 or 9 of Cyrus or year 3 of Cambyses" (p. 2).
- **(E)** "A collation by Sachs and Wiseman has shown that the text from Sippar (Strassmaier, *loc. cit.*) thought to be from the 4th month is correctly to be dated VII/\_\_/acc. [7th month]" (p.12).
- **(F)** "... line 19 reads VI/6/18 ... year 18 is impossible, so we assume either a scribal error or an error by Contenau" (p. 13). This 18<sup>th</sup> year pertained to Nabonidus, king of Babylon.
- **(G)** "Clay in *BE X*, page 2, suggests that the last date may incorporate a scribal error, in view of the evidence for the beginning of the reign of Darius II given below... Since there seems to be some confusion, the date from the unpublished text cannot be used" (p. 18).

cp156» In A. K. Grayson's, Assyrian and Babylonian Chronicles, the supposed last year of the Babylonian king Nabonidus was added or "restored" to the text (Grayson, p. 109 note for line 5). The last year of king Nabonidus is restored as his 17th year apparently because Ptolemy's list of kings has 17 years for Nabonidus. There is at least one clay tablet that mentions Nabonidus's 18th year (Contenau, see "F" above). In the Uruk King List it has "[x] + 15 years" for Nabonidus (James B. Pritchard, The Ancient Near East Supplementary Texts and Pictures Relating to the Old Testament, 1969, p.566; for more see below).

**cp157**» Wiseman in his *Chronicles of Chaldaean Kings* also projects to us juggling of text and the changing of text:

- Concerning British Museum tablet # 21901, "iqbiuma. The word, with the sign -bi, is written clearly. J. Lewy, MVAG, 1924, p. 82 reads ik-kas-sam-ma... Landsberger-Bauer (ZA, XXXVII (N.F.3), P. 85) object to both readings and propose ik-sur (!)-u-ma" (p. 80). This word was "written clearly," yet scholars still changed the word.
- "This restoration is suggested by Oppenheim.." (p. 80).
- "The restoration of this line is very uncertain" (p. 81).
- Restoration suggested by Lewy... but only the final *MES* is legible.." (p. 81).
- "The name, as restored by Gadd (*FN*, P. 35, n. 2), must have occurred in this line" (p. 82).

#### Concerning B.M. 21946:

This is only one of several possible restorations.." (p. 84).

# 4: 77 Years of Missing Evidence

cp158» 77 years of missing evidence for secular chronology is a fourth and major problem:

"There is no evidence from contemporary business documents for the years 17 to 19 of Darius II, nor are there dated tablets from the accession year of Artaxerxes II ... The length of the kings' reigns from here on are established chiefly by use of the well known Ptolemaic Canon" (p. 18, emphasis added).

cp159» There is no evidence that Artaxerxes II followed Darius II because there are no economic texts at the end of Darius II nor the beginning of Artaxerxes II. The Artaxerxes II is only *recognized* as king in 404 BC, that is, *recognized* because of the Ptolemaic Canon states there is a Artaxerxes *after* Darius II. But in fact the texts attributed to Artaxerxes II may be texts for Artaxerxes I.

**cp160**» The lack of economic or business texts was blamed by Olmstead in his *History of the Persian Empire* on "linguistic decay" rather than on a faulty chronology:

"No monarch after Darius the Great had attempted a long composition, much less an autobiography. The language of Xerxes' much fewer inscriptions shows the beginning of linguistic decay, and the rare official records from the fourth century indicate almost complete ignorance of grammatical structure.... But an almost complete break in the series of administrative and business documents at the middle of the fourth century implies that its use was more and more confined to the learned" (p. 480).

We also see that other forms of writing mysteriously disappeared during this period.

cp161» Grayson in his Assyrian and Babylonian Chronicles speaks of the "complete absence of texts" for this period of Persian rule (p.23). The Persians themselves have no record of the length of kings, or a list of kings for this period. It is because of this "linguistic decay" that the chronology of the period of Artaxerxes II and III, and Darius III is dubious.

cp162» The various systems of Egyptian chronology (Africanus & Eusebius) do not show a Artaxerxes II ruling Egypt after Darius II, but does show a 47 to 64+ years between Darius II and Ochus (Artaxerxes III) when Egypt was

ruled by the so-called Dynasties XXVIII-XXX (Budge, *The Book of the Kings of Egypt*, pp lxxi-lxxii).

cp163» In Flavius Josephus's *Antiquities of the Jews*, book XI, chapter VII, according to the contemporary view, Josephus omits the rest of the kings after Artaxerxes II (the "another" Artaxerxes, chapter VII) up until Darius III. But if Ptolemy's king list is wrong, then Josephus did not really omit these kings because they never existed, or more likely because of the lack of historical evidence for this period. The word flow of this part of Josephus's work does not suggest there were any kings between Josephus's "Artaxerxes" of chapter VI and "Darius, the last king" of chapter VII. The "another" of "another Artaxerxes" in chapter VII was probably added to the original text by those who, mistakenly or not, thought that there was another Artaxerxes after Artaxerxes I.

cp164» There are NO contemporary cuneiform documents to confirm the reign of Artaxerxes III, Arses, and Darius III (see pp. 18-19). The quote by Olmstead in his *History of the Persian Empire* (p. 437) where king Ochus is identified with king Artaxerxes III is of little value since this is quoted from Smith's *Babylonian Historical Texts* (pp. 148ff) which said the text was corrected or "which after *collation* reads." Smith took this from Strassmaier but does not tell us who made the collation, himself or Strassmaier. The text as quoted by Smith does not identify this king Ochus as Artaxerxes III, but just "Artaxerxes." This Artaxerxes could have been Artaxerxes I. Furthermore, Smith does not say if in the "collation" of the source text(s) that Artaxerxes was added to the text so as to help identify king Ochus. Smith does not give enough detail for us to make an intelligent decision.

#### **Persian Chronology Dubious**

cp165» I do not know the chronology of this period of the Persian empire because of the lack of sufficient cuneiform texts that mention the supposed later kings of the Persian empire, because the Bible does not give any clear evidence for the kings of this period, and because others, like Ptolemy, have been caught in some fudging of calculations and observations. All this evidence throws a negative light on Ptolemy's list of kings for this period.

## Absolute Dates and Edwin R. Thiele

cp166» Points (1) to (4) should cast an enormous shadow on anyone claiming to have an *absolute date* based primarily on Ptolemy's Canon. Furthermore, *absolute dates* based on vague reports of astronomical phenomena, especially reports of only one eclipse or one planet position, are dubious as we saw in the previous section. [cp83] But Notice the claim made by Edwin R. Thiele:

"Two eclipses [621 & 568 BC] establish beyond question 605 as the year when Nebuchadnezzar began his reign. The first took place on April 22, 621, in the fifth year of Nabopolassar, which would make 605 the year of his death in his twenty-first year, and the year of Nebuchadnezzar's accession. The second eclipse was on July 4, 568, in the thirty-seventh year of Nebuchadnezzar, which again gives 605 as the year when Nebuchadnezzar began to reign. No date in ancient history is more firmly established than 605 for the commencement of Nebuchadnezzar's reign" (*A Chronology of the Hebrew Kings*, p. 69).

**cp167**» In part Thiele is wrong, but, in part, he is right. 605 BC is not an *absolute date*, it is a secondary date or a date found indirectly through an absolute date. 605 BC is when Nebuchadnezzar took over reign as sole king after his father died. It is his accessional year. The date 605 BC is found indirectly only by subtracting the years of Nebuchadnezzar's regnal years. His official reign, according to the cuneiform tablets called the Babylonian Chronicle and the astronomical clay tablet dated in Nebuchadnezzar's 37th year (568-567 BC), began in 604 BC in the Spring (see CP5).

**cp168**» The so-called eclipse of 621 BC is found only in Ptolemy's *Almagest* (G.J. Toomer, p. 253). But the eclipse of 568 BC was found reported on a cuneiform tablet for the 37th year of Nebuchadnezzar. Also on this tablet were reports of other astronomical data. It is the other astronomical data (along with the eclipse) that dates this tablet and helps to prove that Nebuchadnezzar began his official sole reign in 604 BC, while his accessional year began in 605 BC. A single eclipse by itself cannot date an event (see CP3 for more detail on the 37th year tablet).

## Nabonidus' 18th Year

**cp169**» The date 539 B.C. for the fall of Babylon is *incorrect* because the date 539 BC was deduced from the date 605 by adding the supposed total of the reigns of the kings who reigned from 605:

The date 539 for the Fall of Babylon has been reckoned from the latest dates on the contracts of each king in this period, counting from the end of Nabopolassar's reign in 605 B.C., *viz.*, Nebuchadrezzar, 43: Amel-Marduk, 2: Nergalshar-usur, 4: Labashi-Marduk (accession only): Nabonidus, 17 = 66 (Clay, *Pennsylv. Bab. Exp.*, Series A, VIII, 4. See also Pinches, *T.S.B.A.* VI, 486;" *Cambridge Ancient History*, Vol. III, 1929, p. 224, footnote 1).

The problem here is that there is proof that Nabonidus ruled into his 18th year.

**cp170**» The length of reigns for the kings during this period was taken primarily from Ptolemy's list of kings, but also from business clay tablets, from two astronomical clay tablets, from chronicle-like tablets, and from their interrelationship with Biblical texts (see CP2 & 3).

cp171» But the English translation of the Nabonidus Chronicle, that is, the text that shows when and how Nabonidus and Babylon fell, has the year of king Nabonidus in square brackets, with indicates that the text was "restored" (*The Ancient Near East: An Anthology of Texts and Pictures*, [1958] Edited by James B. Pritchard, pp. 203-04, vi; see Smith's *BHT*, p. 117; and see Grayson, *ABC*, p. 109, note, iii 5). This means that the year for the fall of Babylon and thus the last year of the supposed last king of Babylon, king Nabonidus, was "restored" to the text by using the king's list of Ptolemy, since the last year of the king was either damaged or not in the original text. Of further interest is that the Uruk King List is damaged for the number of years for Nabonidus: "[x] + 15 years: Nabonidus" (Pritchard, *The Ancient Near East*, 1969, p.566 or 130). We therefore cannot use it to ascertain the total years of Nabonidus' reign.

cp172» Josephus says Nabonidus reigned 17 years, but Josephus also mistakenly said Evil-Merodach reigned 18 years when Ptolemy's Canon says he ruled 2 years (*Antiquities of the Jews*, book 10, chap. 11). "Again, the numbering of regnal years does not need to agree with history. Charles II of England actually became king on 29, May 1660, but his regnal years were counted from the death of Charles I on 30 January 1649. Ancient rulers, too, could for various reason antedate the beginning of their reigns. On the other hand, a disputed succession could confuse the scribes. Twelve years

after the death of Philip Arrhidaeus, in 305 BC, a cuneiform document was dated: 'King Philip, year 19" (Bickerman [1968], p. 90).

cp173» In a clay tablet found in Georges Contenau, *Contrats Neo-Babyloniens*, the date for the contract is the sixth month, sixth day, 18th year of Nabonidus (see above under, "Reading dates into..."). Sometimes when certain cities hadn't received word yet of the new king, or there was a revolt, they kept using the would-be year of the old king until it was clear who was in power (Parker & Dubberstein, p. 11, 18, 20). But the fact that this clay tablet recorded Namonidus ruling into his *sixth* month of his 18th year makes this very unlikely. The 16th day in the seventh month (Tashritu) was the time Babylon fell according to the *Nabonidus Chronicle*. Thus the last known recorded date of the reign of Nabonidus fits the supposition that Nabonidus may have reigned into his 18 year. There is also at least one other tablet that has Nebonidus ruling after the traditional date for the fall of Babylon (10th day 8th month 17th year, Parker & Dubberstein, p.13).

cp174» In Wiseman's *Chronicles of Chaldaean Kings* (p. 2), his chart indicates there are no chronicle tablets for the years 11 to 43 of the reign of Nebuchadrezzar II, or Amel-Marduk's reign, or several years of Neriglissar's reign, or the reign of the supposed king Labasi-Marduk. Of course the Bible gives evidence for Nebuchadrezzar's latter years as well as the beginning of Amel-Markuk's reign (see CP3). And there are reported to be economic texts for some of these missing years of the chronicle of the Chaldean kings (Parker and Dubberstein, pp. 12-13).

#### Nabonidus' Mother's Memorial Tablet

cp175» Two copies of a memorial tablet, one of poor quality found in 1906 and one in much better condition found in 1956, that were written in part by/for the mother of Nabonidus, give the same length of reigns as Ptolemy's list of kings for the years of Nabopolassar through the 9th year of Nabonidus, the year she died (James B. Pritchard, Ed., *The Ancient Near East: Supplementary Texts and Pictures Relating to the Old Testament*, 1969, pp. 560-561 [pp. 124-125]). Contrary to what some writers like Velikovsky think (*Ramses II...*, p. 111 ff), it may have been common practice to have more than one memorial stelae or tablet as it was the case when kings built or restored temples. When kings restored or built temples or other important buildings they made several tablets and spread them around the foundations so that future generations would know who built it:

The face of the wall was smoothly rendered with mud plaster; much of this had fallen away and we very soon cleared off the rest, for beneath the plaster there was a

dramatic discovery to be made. At regular intervals of 2 feet there appeared the small rounded heads of clay 'nails' driven into the mud mortar between the brick courses; these were 'foundation-cones' and on the "nail's" stem was the inscription... Such cones were familiar enough as objects on museum shelves, but now for the first time we saw them in position just as the builders had set them four thousand years before. That they should be found *in situ* is of course most important scientifically, for we not only learn that a particular king built a particular temple, but ...." "Hidden in the brickwork of the top stage of the tower he found, at each angle of it, cylinders of baked clay on which were long inscriptions giving the history of the building" (*Ur of the Chaldees* [1982], pp. 140, 142, see pp. 105-07, 155-61, 227).

cp176» This clay tablet by the mother of Nabonidus does not give the total length of Nabonidus' reign. Daniel doesn't give the total years of this king either, but tells us it was in the kingship of Belshazzar when Babylon was destroyed (Dan 5:1-31). Belshazzar's co-kingship with Nabonidus is implied by comparing Daniel 5:1 with BM 35382, the Nabonidus Chronicle.

(see Grayson *ABC*, pp. 106-108, "prince"; Smith, *BHT*, p. 116, "Crown Prince"; and Grayson & Redford, *Papyrus and Tablet*, p. 120, "the prince, Belshazzar." "Belshazzar" is not in this text, but through restoration is put there by Grayson; see Velikovsky, *Ramses II*, p. 105, note 5; and see Dougherty, *Nabonidus and Belshazzar*; see CP5: Notes)

And this co-kingship of Belshazzar and Nabonidus is further proven by comparing some letters with the Nabonidus Chronicle (see CP5, Notes).

cp177» Through Biblical scripture we can ascertain that there were 70 years between Nebuchadnezzar's co-kingship with his father and the Fall of Babylon (see CP5 years 3385-3454 YM for more details on the 70 years and on Nabonidus' 18th year).

# **Secular Chronology: Other Problems**

#### **Cuneiform Tablets: Excavation and Publication**

cp178» "Many an excavation, if not all, had to be stopped before completion or had to restrict itself from the very beginning to a few trenches crossing the ruin in the hope of getting a general insight into the character of the stratification.... Until 1951 not for a single astronomical or mathematical text was its provenance established by excavation. The only apparent exceptions are a number of multiplication tables from Nippur or Sippar but nobody knows where these texts were found in the ruins. Consequently it is, e.g., completely impossible to find out whether these texts came from a temple, a palace, a private house, etc. Not even the stratum is known to give us a more accurate date of the texts.... Thus we are left with the texts alone and must determine their origin form internal evidence, which is often very difficult to interpret...."

cp179» "The Mesopotamian soil has preserved tablets for thousands of years. This will not be the case in our climate. Many tablets are encrusted with salts... A change in moisture produces crystals which break the surface of the tablets, thus rapidly obliterating the writing. I have seen "tablets" which consisted of dust only, carefully kept in showcases.... Many thousands of tablets have been acquired at high cost by big and small collections only to be destroyed without ever being read or recorded in any way."

cp180» "The publication of tablets is a difficult task in itself. First of all, one must find the texts which concern the specific field in question. This is by no means trivial. Only minute fractions of the holdings of collections are catalogued.... I would be surprised if a tenth of all tablets in museums have ever been identified in any kind of catalogue."

cp181» "Tablets are often inscribed not only on both sides but also on the edges. Only multiple photographs taken with variable directions of light would suffice. Thus cost and actual need have resulted in the practice of hand copies."

cp182» "The ideal method of publication would be, of course, direct copying from the text. In practice this is often excluded by the scattering of directly related material all over the world. Even with great experience a text cannot be correctly copied without an understanding of its contents.... Thus repeated collation, joining with other fragments, and comparison with other texts are needed. It requires years of work before a small group of a

few hundred tablets is adequately published. And no publication is "final". Invariably a fresh mind will find the solution of a puzzle which escaped the editor, however obvious it might seem afterwards" (pp286-290 taken from: O. Neugebauer, *The Exact Sciences in Antiquity*, 2nd Ed., Dover 1969 edition, pp. 59-62).

## Roman Historical Gaps

**cp183»** "The ancient sources of information for certain periods of Roman Imperial history, notably the Third Century, are very poor .... Other periods are much better documented, and I have in the main followed such learned works as the *Cambridge Ancient History* and the *Cambridge Medieval History*" (p. 6, *The Emperors of Rome and Byzantium*, by David R. Sear, Seaby Ltd, London).

**cp184»** The problem with using these Cambridge historical works for chronology is that their chronological charts have few if any documentation to back up their dates. An unknown number of dates are merely educated guesswork. Of course educated guesswork is better than no chronology.

## Era of the Olympiads Rarely Used

**cp185**» "The old era of Olympiads appears only to have been used by writers, and especially by historians. It does not seem to have been ever adopted by any state in public documents. It is never found on any coins, and scarcely ever on inscriptions.

cp186» A new era of Olympiads however came into use under the Roman Emperors which is found on inscriptions and was used in public documents. This era begins in Ol. 227.3., in which year Hadrian dedicated the Olympieion at Athens..." (Bond, p. 192; also see Samuel and Bickerman's books concerning chronology).

#### Era of the Foundation of Rome

**cp187»** "Great doubts have been entertained by historians and chronologists respecting this era" (Bond, p. 195; see CP3).

## **Public Documents in England**

**cp188»** "Public documents in England, from the time of Richard the First, down to the present day, have been usually dated with the year of the reign of the sovereign, and not with the year of our Lord" (Bond, p. 273).

## No Zero Year: Historical v. Astronomical Dating

cp189» "In the historical dating of events there is no year A.D. 0. The year immediately previous to A.D. 1 is always called B.C. 1. This must always be borne in mind in reckoning chronological and astronomical intervals. The sum of the nominal years B.C. and A.D. must be diminished by 1. Thus, from Jan. 1, B.C. 4713 to Jan 1, A.D. 1582, the years elapsed are not 6295, but 6294" (Bond, p. 321).

cp190» In Astronomical dating there is a year 0 and the BC dates are always one short of the historical dating system. Normally, astronomical dates are marked with a minus sign ("-") in front of the date — "-4." And -4 equals 5 B.C. But because some do not understand the difference between the astronomical and the Christian Era system sometimes writers put -4 when they mean 4 B.C. To be correct they should write -3 to indicate 4 B.C (also see Finegan [1964], ¶ 221).

#### **Observed or Calculated Data?**

cp191» "Very often it is difficult to decide whether text data were observed or calculated. We know from the diaries of later times that missing observations were filed in by calculation, sometimes without explicit indication of the fact, sometimes with the note 'not observed,' sometimes with a note that the observation gave a different result. In the case of Sirius phenomena an investigation by A. Sachs has shown that calculation was the rule, even when the statement 'not observed' is missing" (Science Awakening II: The Birth of Astronomy, by Bartel L. vander Waerden, p. 101, quoted by Rose in Kronos, Vol IV, No. 2).

**cp192»** "... the dates when a planet enters a zodiacal sign are recorded. These texts are based on computations, not on observations, as in evident from the fact that entrances into a zodiacal sign are also noted when the planet is in conjunction with the sun, this being invisible."

cp193» "... one had to assume an extremely high visibility for the horizon in Babylon in order to cover all recorded cases, not realizing that these

records contained invisible and visible risings alike" (pp. 90 & 132, *The Exact Sciences in Antiquity*, by Otto Neugebauer, quoted from Rose in *Kronos*, Vol IV, No. 2).

**cp194»** In *The Crime of Claudius Ptolemy* (1977) R.R. Newton speaks of Ptolemy fabricating data of so-called ecliptic observations, as far back as the 8th century B.C. Ptolemy in many cases used his inaccurate calculations to locate supposed observations of eclipses.

**cp195**» Also see Robert R. Newton's *Ancient Planetary Observations* and the Validity of Ephemeris Time where he shows other examples of ancient astronomical tablets that in part were calculations and not observations ("goal-year texts," pp. 104ff, 128).



# CP3: Methods, Chronology, Calendars, Absolute Dates, Chaos, and other Details

Patriarchal Years

**Inclusive Counting** 

**Comparing Reigns** 

Verification of Chronological Periods

Hebrew Calendar

**Absolute Dates** 

**Astronomical Chaos** 

Other Important Information

cp196» As we just saw in the *Chronology Papers*, Part 2, secular chronology is very difficult and probably incorrect in some cases by hundreds, if not thousands of years. Also the evolutionary time scale may be off billions of years because of its premises. So we turn to the Bible and its chronology. This is also not simple and not obvious. There are several ways, or methods, used to figure the number of years of man, that is, to figure the chronology of man. Remember this is a Biblical chronology. We showed in CP2 why secular chronology cannot be trusted. The Bible has different ways of counting time. We'll show you each method in chronological order.

## (1) Patriarchal-Year Method of Counting Years

#### Method used from Creation to Abram

cp197» The beginning of the biblical chronology is figured through the count of years of a patriarch from his first New Year's *day* on which he was alive until (and counting) the birth year of his son. In Adam's case his birth day was the very first year of man (YM), and since there was no patriarchs before him, the first year had to count as his first year, the first year of the patriarchs and the first year in the count of the years of mankind. This patriarchal-year method is the addition of the years (of man) from one

patriarch to the next patriarch. For example, "And Adam lived a hundred and thirty years, and begat [# 3205, 'was born'] ... Seth ... And Seth lived a hundred and five years, and begat [# 3205] Enos" (Gen 5:3, 6). From this we see that Adam lived in 130 years, and in his 130th year Adam's son, Seth, was born, and Seth lived in 105 years and then his son Enos was born in his 105th year.

cp198» Adam was created in the very first year of man (YM) — and since there were no patriarchs before him this very first year had to count as his first year. Adam lived throughout the first year. It was his first year. It was also the first year of man. In the English Old Testament of the Bible the word "man" is translated from the Hebrew word, *adam*. In Hebrew *adam* means "red" or by inference (Gen 2:7), "red clay.": "And LORD God formed man of the dust [Hebrew: Strong's # 6083 - '(red) clay or dirt'] of the ground" (Gen 2:7). Thus the first year of man was counted also as Adam's first year. Sometime in the 130th year of man (130 YM), which was also the 130th year of Adam, Seth was born to Adam. But Seth's first year in the patriarchic count of years was not the year 130 YM, but the year 131 YM *because* Seth was not alive on the first day of the 130th year of mankind. Thus, Seth's patriarchic years are counted from the very beginning of 131

CREATION OF MANKIND OF MAN

1st YEAR

OF MAN
Mankind, ADAM, was created on the
first day of the first year of man;
Adam lived until 930 YM (Gen 5:1-2,5)

SETH's first year 131 YM born in 130 YM; died in 1042 YM, son of 912 years (Gen 5:3,8)

ENOS's first year 236 YM born in 235 YM; died in 1140 YM, son of 905 years (Gen 5:6,11)

YM. Seth's 105th year was the year 235 YM. Sometime in that year Enos was born. But Enos first year, that is his first New Year's day, was not in the year 235 YM, but the year 236 YM. Enos's years began at the very beginning of 236 YM.

	MY	
		-Adam Created
1st YM	1	1st Year of Adam
2nd YM	2	2nd year of Adam
3rd YM	3	3rd year of Adam
687th YM	687	Methuselah's birth
688th YM	688	1st year of Meth.
689th YM	689	2nd year
1655th YM	1655	968th year of Meth.
Flood	1656	969th year, died
	1657	

# First Day of New Year is Important: Similar to Accessional year system

**cp199**» The year of the patriarch was counted only if he was alive on the first day of the new year. This method is similar to the accession-year system used by Babylonia, Assyria, and Persia to count the years of kings:

"In the accession-year system, the portion of a year from the accession of the king to the end of the then current calendar year is only his 'accession year" (and for chronological purposes remains a part of the last numbered regnal year of his predecessor), and the new king's year 1 begins only on the first day of the new calendar year after his accession" (paragraph # 161, Jack Finegan, Handbook of Biblical Chronology, 1998 Rev. Ed., italics are my emphasis).

#### Years Old or "Son"

**cp200»** Many times it speaks of the patriarchs and kings being so many "years old" in such English versions as the King James Version. But in the Hebrew it says: "a son of xx years." It is not speaking of birthdays, but speaks of how many years of man the patriarch or king were connected to or were "sons" of. The word "son" in English was translated from the Hebrew ben (# 1121), which has a broad meaning (see Lexicon).

#### Long-Lives of Patriarchs; Radiation, Flood, Water

cp201» Why are the patriarchs registering such long lives in the Bible? 930 years for Adam; 912 years for Seth; 905 years for Enos. Although we cannot be absolutely sure it may be because the atmosphere before the Flood was more protected from radiation from outer space. After the Flood the protection of the "water" above the earth (Gen 1:7) was destroyed when the "windows of heaven" (Gen 7:11) were opened by the catastrophic events around the time of the Flood. The water for the Flood that covered the mountains by 15 cubits, was from the "great deep" and from above the earth (Gen 7:11; 1:7). The seas (Gen 1:10) before the Flood were probably much smaller and the mountains much less higher than today's mountains. Mountains in the pre-Flood period may only have been hills. During and after the catastrophes of the Flood the mountains raised and the valleys fell to form the present great mountain ranges and great ocean floors. (see Psa 104:8, Heb. text) The vast oceans we see today and the high mountains came from the catastrophe of the events of the Flood. Water for the great Flood was kept in store for the Flood under the earth and over the earth (cf. Gen 7:11; 1:7). Our intelligent and extremely complex life-systems come from something that is super intelligent, not from the extremely pretentious yet overly simplistic theory of evolution

## (2) Inclusive Counting Method

#### Used from the 430 Years Until Solomon's 4th Year

cp202» There is a method of counting days or years inclusively in which the first day or first year of the count is started at any time within the day or year (see Exo 19:10-11; Lev 7:15-17; 19:5-7; for years see: 2 Ki 19:29; Jer 25:3, 1-3). They could say, for example, today, tomorrow, and the next day. The "next day" being the third day for a count of three days (Exo 19:10-11; Luke 13:32). Today equals the first day, tomorrow the second day, and the next day is the third day. Or they could say, I will meet you the third day. Today being the first day, tomorrow the second day, and the next day the third day. There is a vagueness to this kind of counting because usually when someone counts like this the first day or year of the count and the last day or year of the count need not be full 24 hour days or full years. Today is the first day even if they started their counting from the beginning, middle, or end of the day. Or this year is the first year even if they started their counting from the beginning, middle, or end of the year. The second day or year is the second day or year throughout. The third day or year is the third day or year at any time from the beginning to the end of the day or year. But there is even a greater vagueness if they started counting the days or years at the very end or very beginning of a day or year. Were they beginning their count from

the very end of the "today/year" or from the very beginning of "tomorrow/year"? This ambivalence is one reason for the confusion about the number of days Christ the man was left in the grave (See GP4).

**cp203**» Examples of inclusive counting are the 430 years of Israel's sojourning, the 480 years from the Exodus to Solomon's 4<sup>th</sup> year, the 15 cycles of 49 years: 2546-3281YM (see 3281 YM), and the 23 years of Jeremiah's prophesying: 3365-3387YM (See CP5).

### Patriarchal or Regnal Years Not Inclusive Counting

cp204» When they counted the years of a patriarch, they were not counting birthdays, nor were they counting how many years a patriarch *lived in*, but how many years of man that were credited to them starting from the very first New Year's day they lived in. This is different from how many total years they lived in, for the patriarchs (except Adam) "lived in" one more year than was credited to them — the year of birth is not credited to a patriarch, except Adam. When Judah counted the years of the reign of a king, they were counting how many New Year's days he reigned in, not how many years he reigned in. In this method David was counted as reigning for 40 years when in fact he reigned in 41 years. (He reigned for six extra months in Judah.) But David only reigned in 40 New Year's days, thus was counted as reigning for 40 years (2 Sam 5:4-5 compare with 1 Chron 29:27).

# <u>Inclusive Count</u> of 430 years of sojourning: Method from Abram to the Exodus

From Abraham's 70th year we count 430 years <u>inclusively</u> to the Exodus.

cp205» The method of adding the years from the birth of one patriarch to the next holds good until Joseph with only a few apparent difficulties, which are explained in the text of our chronology. In the chronology we see that the date of the call of Abram is related to the date of the Exodus and the 400 years prophecy. The prophecy of the 430 years of sojourning leads us to the date of the Exodus.

#### **Inclusive Count of 480 years: Method From the Exodus to Solomon**

From the Exodus we count 480 years <u>inclusively</u> to the 4th year of Solomon's reign by using the verse, 1 Kings 6:1.

**cp206»** In our chronology we list other events and their dates between the Exodus and Solomon. The documentation with these other dates should enable you to ascertain how we figured these dates.

### **Book of Judges**

cp207» It is noted that the periods inside the book of Judges cannot be figured because of the overlaps in various time periods within the book of Judges. Unlike the later period of kings for the kingdom of Judah and Israel, the period of Judges gives us nothing to compare the years of reign. The problem being that sometimes reigns overlap and there may even be short periods without kings, but with the given information we cannot figure this out. In other words, the Bible did not give us enough information for us to ascertain the true chronology for this period of judges. But the information on the 480 years in 1 Kings 6:1 allows us to skip this period while still being able to figure the chronology of mankind.

# (3) <u>Comparing reigns</u> of Judah v. Israel Kings: Method from Solomon Through the Kingdoms

### Method of Counting of Regnal Years

#### Regnal Years and Accessional Year Method

cp208» The next method of continuing our chronology is used for the period of the kings of Israel and Judah. The method of figuring the chronology of this period is by comparing the reigns of the kings of Judah to the reigns of the kings of Israel and vice versa. But in order to do this we must know how they counted regnal years. As shown in (1) above, the count of years for each patriarch begins on the first New Year's day in which he was alive. This is the similar to the count of years for the reign of Judah's kings in the divided kingdom, as well as David and Solomon in the united kingdom. Outside of co-reigns, the *count* of years for Judah's kings began with the first New Year's day in which he reigned. If a son of a king, after his father's death, is crowned king in the 15th year of his late father's reign, then the son's first official regnal year begins in his first New Year's day of his reign, which would be the very next New Year's day after his father's

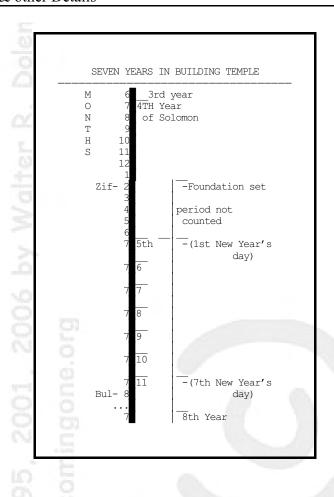
15th year. That is, he officially begins to reign in what would have been his father's 16th year. This is like:

- the accessional year method explained in Jack Finegan's
   Handbook of Biblical Chronology [1964 & 1998], Paragraph
   161
- the method used in Ptolemy's Canon and the method of the Babylonian kings between 626 and 539 BC [sic] (Bickerman, p. 66; BM 21946; etc.)
- and like the Patriarchal method explained above under (1)

This is the secret to counting the years of man and counting the years of the kings of Judah.

### Confirmation of Judah's Regnal Year

cp209» There is proof that Judah's regnal year always began in the Fall, and that they used the accession-year system to count regnal years of each king of Judah. Some confirmation that the regnal year for the united kingdom and the divided kingdom of Judah started in the fall and that they counted reigns by New Year's days is found in 1 Kings 6:37-38 and Jeremiah 36:1-9. Solomon is reported to have taken seven regnal years to build the house of the LORD (1 Ki 6:38). The foundation of the house began in the 4th year of Solomon the second month, the month of Zif (6:1, 37). It was finished in the 11th year in the eighth month, the month of Bul (6:38). If you understand that the regnal year started in the seventh month, then you understand that he actually took about 6 ½ years to build it, but it included 7 new year's days, thus in this kind of counting it is counted as 7 years. See chart below.



cp210» Another proof of the Kingdom of Judah's regnal year: In the chronological flow of Jeremiah 36:1-9, Jeremiah, in the 4th year of Jehoiakim (king of Judah), told his scribe Baruch to read from the book (that Jeremiah wrote in the 4th year) in the coming fast day (v. 6). Baruch read the book in the 5th year, in the 9th month (v. 9). This was only two months after the end of the 4th year. Their regnal years were from 7th month to 7th month (Fall to Fall).

# **Comparing the Different Regnal Systems from Solomon Through the Kingdoms**

## Regnal Years Started at Different Times

cp211» The method of figuring the chronology of this period is by comparing the reigns of the kings of Judah to the reigns of the kings of Israel and vice versa. Although there was overlapping of reigns in this period much like the period of Judges, this difficulty was overcome by comparing the reigns of the kings of Judah to the kings of Israel. From this method we learn that the kings of Judah always counted their king's regnal years from fall to fall while Israel also seemed to count their regnal years from the fall to fall of each year up to king Omri and from Jehu up to Hoshea. The other kings of Israel used the spring to spring method of dating regnal years. The Text of the Biblical Chronology contains the detail of this comparison (See CP5).

#### Judah's Accessional Year System

Israel and Judah counted the total regnal years of their respected kings. Judah figured the first year of their kings as beginning in the first civil New Year's day (1st of Tishri) in which the king reigned. If a king never reigned into a New Year's day (Jehoahaz & Jehoiachin), then that king never was counted as reigning for a year. Instead he is counted as reigning, for example, for "three months" versus one year as in the case for Jehoahaz and Jehoiachin (2 Kings 23:31; 24:8). Also Judah figured the last year of each king's total regnal years as being the year in which the king died, that is, the year in which the king did not reach the next New Years day. This is like the accession year method explained in Finegan's Handbook of Biblical Chronology [1964 & 1998], Paragraph 161. This method is similar to the Patriarchal method described above.

#### Israel's Non-Accessional Year System

cp213» Contrary to Judah's system, in most reigns if not all reigns up to Jehu, Israel figured the first year of their kings as beginning in the year that each king took office even though the king hadn't reigned the full year, or had not reigned on the first day of that year. Also Israel counted the year in which a king died as belonging to the dead king. But starting with Jehu Israel did not follow this method. Consequently, before Jehu Israel counted some years twice: once for the dying king; and once for the succeeding

king. This means that sometimes in the chronology when you compare the total regnal years for Israel's kings with the total regnal years for the kings of Judah you will find that Israel's total regnal years exceeded Judah's. This part of the Chronology is very difficult; some regnal years of Israel in particular may be off the mark by as much as one-half to one year, but not necessarily since there are numerous scriptures that verify the way we have presented this period (see "Verification" below).

#### Interregnal years

cp214» Contrary to many Biblical chronologies, this present Biblical chronology, the *Chronology Papers*, does not assume that there were interregnal years between Judah's kings Amaziah and Uzziah or between Israel's kings Jeroboam II and Zechariah. This is so because the Bible states that Uzziah (that is Azariah) reigned "instead of" or "in the room of his father" Amaziah, and that Zechariah reigned after Jeroboam II's death "in his stead" (2 Kings 14:21, 29; 2 Chron 26:1). There is a vagueness to these scriptures that does not lead us to a certain conclusion. There seems to be no clear evidence in the Bible that during these periods there were interregnal periods. Yet there may have been interregnal years because of catastrophes or invasions by other nations. *Nevertheless, the count of years is not lost since either Judah or Israel had a king with a continuous reign during any possible interregnal period.* 

#### Co-Reigns

cp215» In the case of the kings of Judah and Israel sometimes more than one king from each kingdom reigned at the same time. This is called coregencies and usually involved a father and his son: the son being the "crown prince" or co-king. The usual reason for this was that a war was going on or the father-king was ill or injured (See CP5, Chronology Text).

#### **Changes From One Regnal System to Another**

cp216» By studying the scriptures concerning the kings of Judah and kings of Israel in their divided kingdom, we see some kingdoms over the years changed their system from one to another depending on the king's preference. Jeroboam started using the non-accessional year method and this was continued until Jehu, thus his first year was the same as Solomon's last year. Possibly in order for king Omri to make his reign seem older than king Tibni (or for some other reason), he used the non-accessional year method to count his regnal years as well as to change his regnal year from

fall to spring (see CP5). But king Jehu in his reforms changed both of these methods that Jeroboam and Omri initiated back to the method of Solomon and the method of the kingdom of Judah (see CP5). Yet under the influence of the Assyrians the system of counting regnal years was changed again under Hoshea (see CP5).



# Verification of Chronological Periods

**cp217»** All the sections of the *Chronology Papers* show how complex chronology can be. There are numerous ways to make mistakes. But if we adhere to the reliability of scripture we will eventually obtain a chronology that will be correct. In the text of the Biblical chronology there are many scriptures that help to verify or double check the chronology. What follows are important examples:

#### cp218»

The chart on **Abraham's age** in relation to Isaac and Ishmael helps to verify the Patriarchal counting method for counting the years of the patriarchs (see CP5, 2083-2109 YM).

#### cp219»

The **Jubilee Year** count (inclusive counting method) mentioned under 3281 YM helps to verify the period between Israel's going into the promised land (2546 YM) and the year 3281 YM.

#### cp220»

The **42 Years of Omri's house** helps to verify the method of counting the reigns of kings between Omri and Ahaziah, 3067 through 3108 YM (see CP5, "Note" near 3108 YM).

#### cp221»

■ The **23 Years of Jeremiah** (inclusive counting method)
helps to verify the count of years for that period (See CP5, 3365
- 3387 YM).

#### cp222»

The **37 Years of Captivity** (inclusive counting) of Jehoiachin helps to verify the common use of inclusive counting by the Jews but also the counting methods for Judaean and Babylian kings for that period (See CP5, 3394 - 3430 YM).

#### cp223»

The chart on the **seven years in building Solomon's temple** helps to also verify the method of counting regnal years.

This is located above after cp210.

cp224»

Events dated in the **regnal years of the kings of Judah** and in the **regnal years of the Babylonian king Nebuchadnezzar**, indicate the Judah's regnal years began in the fall, while Babylon's regnal years began in the spring.

See CP5 and pertinent scripture. (Example: Jerusalem burned in the 11<sup>th</sup> year of Zedekiah, which was the 19<sup>th</sup> year of Nebuchadnezzar.) See also the "Confirmation of Judah's Regnal Years" above for proof of how Judah counted regnal years.

cp225»

■ The 25<sup>th</sup> year of Jehoiachin's captivity synchronized with the 14<sup>th</sup> year of the destruction of Jerusalem in Ezekiel 40:1 helps to verify the inclusive count of the years of this period.

## **Connection to Christian Era System**

#### **Connecting Christian Era System to Biblical Dates**

cp226» The Bible ties the Babylonian king Nebuchadnezzar to various kings of Judah. There is a clay tablet (VAT 4956) that identifies the 37th year of Nebuchadnezzar's reign with a specific time. By retro-calculation using the astronomical data in the clay tablet (VAT 4956) we know that this tablet is dated in the years 568-567 BC of the Christian Era system. Through the Biblical ties between Nebuchadnezzar and the kings of Judah (Jer 25:1), we can give a Christian Era date to the Biblical Year of Man (YM). Thus by placing the Christian Era date next to our Year of Man date we synchronize both dating systems back to Adam.

**cp227**» In order to better understand the *Chronology Papers* you must have the knowledge found in Parts 2, 3, and 4. You must thus have more knowledge of the Hebrew calendar and other methods of keeping time.

#### Not A.M. Method

cp228» When we say "in 236 YM," it means "in the 236th year of man." It indicates that 235 full years have passed and that we are referring to the time *in* the next year after the first 235 full years of mankind. This is like the method used for the reigns of kings: When you say, "in the 4th year of Solomon," you mean in the year following 3 full years. This method is *different* from those who use *anno mundi* (A.M.). Our year "131 YM"

corresponds to their 130 A.M. Our YM method is like the method used for the reign of kings, and not like the A.M. method used by others.

## Review of Methods of the Chronology

**cp229**» See and read CP3, CP4, and especially CP5 for more details on our method of ascertaining the Biblical chronology. The following are the main methods for figuring the chronology.

#### 1-2078 YM

■ Patriarchal Years, Adam to Abraham's call and sojourning.

Note: The method of counting years is not the inclusive counting method, but is similar to the accessional year system. The 2079 date is tied to the prophecy of 400 years.

#### 2078-2507 YM

430/400 Years mentioned in Exodus 12:40-41 and Galatians
 3:17. Abraham's call and sojourning to Exodus. Note:
 Inclusive method of counting years applied here.

#### 2507-2986 YM

■ **480 Years** mentioned in 1 Kings 6:1. Exodus to Solomon's 4<sup>th</sup> year. **Note:** Inclusive method of counting years applied here.

#### 2546-3281 YM

■ The **Jubilee Year** count hinted at in 2 Kings 19:29. From Israel's first year in the promised land until Hezekiah's 14<sup>th</sup> and 15<sup>th</sup> year, or 15 Jubilee periods of 49 years, or thus 735 years. See information under 3281 YM in CP5.

#### 3365 - 3387 YM

■ The **23 Years of Jeremiah** (inclusive counting method) helps to verify the count of years for that period (See CP5, 3365 - 3387 YM).

### 2986 - 3423 ½ YM

■ By comparing the various years of reign of the kings of Judah, Israel, and Babylon during this period the chronology can be figured for this period. This method is very difficult and may be off ½ to one year for this period.

#### $3423 \frac{1}{2} - 3424 \frac{1}{2} YM = 568-567 BC$

■ Cuneiform Tablet VAT 4956 identifies the 37<sup>th</sup> year of Nebuchadnezzar as being between 568-567 BC.

## 3423 ½ YM until Today

■ Nebuchadnezzar's 37<sup>th</sup> year. Astronomical calculation is used to verify this period. Note: This is a key year since the cuneiform table VAT 4956 is directly connected with the 37<sup>th</sup> year. Nebuchadnezzar's reign is connected to Judah's kings through such scripture as Jeremiah 25:1. This then establishes an absolute date for connecting secular chronology with Biblical chronology. See *Absolute Dates* in CP3.

## Possible Problem Time Periods of the Chronology

The remaining possible problem periods are whether or not the reigns of Manasseh, Amon, or Josiah (all kings of Judah) overlapped each other. It appears they did not overlap. But if they did overlap, it means that this period is shortened, and the period after the 37<sup>th</sup> year of Nebuchadnezzar must be lengthened. If these reigns did overlap, the following year for the 6000 year of man may be wrong by the number of years these kings' reigns overlapped. Another problem is the exact calling of Abraham and the exact time the 400 year prophecy started for this prophecy is a tie-in to the calling of Abraham and the beginning of the 430 years because both set of years ended the same year.

## **Hebrew Calendar**

#### Observation and Calculation

**cp230»** At first the Hebrew calendar was one of observation, "the beginnings of the months were determined by direct observation of the moon" (*The Comprehensive Hebrew Calendar*, by A. Spier, p. 1-2). This was so because the Sun, Moon, and stars were "to divide the day from the night; and let them be for signs, and for appointed times [*moed*], and for days, and years" (Gen 1:14). Later this observation system may have been helped by calculation ("Calendar," *Ency. Brit.*, 11th ed., p. 1000; A. Spier, pp. 1-2, 217ff). But in *The International Standard Bible Encyclopaedia* (1915) it states:

"We have lately learned from the discovery of a number of Aram.[aic] papyri at Syene [Egypt] that there was a colony of Jews there who used a calendar constructed, not from observation, but from calculation based upon a very exact luni-solar cycle ... This cycle, known to us by the name of its supposed discoverer, Meton, is one of 19 years, which is only two hours short of 235 complete months. As this Jewish colony appears to have been founded after Nebuchadnezzar's destruction of Jerus[alem] by some of the refugees who fled into Egypt with Johanan the son of Kareah (Jer 40-44), this acquaintance with the Metonic cycle cannot have been due to Bab[ylonian] influence. Nor can it have been due to Egypt, since the Egyptians did not use or require any such cycle, their year being a solar one of 365 days. Indeed no other nation appears to have been aware of it until, a generation later, Meton, the Athenian, won immortal fame by announcing it. The evidence of these Syene papyri renders it probable that Meton did not himself discover the cycle but learned it from Jewish sources" ("Astronomy," p. 305).

cp231» According to this article, and according to information in Finegan's book (¶ 76), Jews used calculation to help with ascertaining their New Moons. In fact, out of necessity of having their holy days at the proper times, even in the event of cloudy skies, the Jews in all probability discovered the so-called Metonic cycle before Meton. If I were to guess it was through Daniel that Nebuchadnezzar and Babylon learned further details of the so-called Metonic cycle (Dan 1:17-21; 2:48; 5:11-12).

## Waning Moon Method

cp232» There is also another method of figuring the new moon without calculation when it is cloudy on the new moon evening. When the moon is waning, that is the light of the moon after the full moon is decreasing, when there is just a small crescent of light left on the moon, it is a day or at most two days before the conjunction of the moon and the sun. You can see the last light of the waning moon about one hour before sunrise the day or two before the conjunction. You can thus figure the first day of the new moon as

figured by the Hebrews (the first new crescent of light on the new moon after the conjunction is the new moon, the beginning of the new month) will occur about three or four days after you have seen the last light of the waning moon. Even if on the new moon the sky is cloudy, you thus will know that it is the evening of the new moon. In 1 Samuel 20:5 it states, David said unto Jonathan, Behold, tomorrow is the new moon." David knew a day ahead that the new moon was going to appear. He may have known this without calculation or knowledge of calculation, because like others in his time, he knew the "waning moon method." They watched the heavens for their calendar. On September 24, 1992, 5:15 am PDT in California, near Stockton, I saw the last crescent light of the waning moon (.05 phase). I didn't see the crescent in the early mourning of September 25 even though the moon was in a .01 phase because its position in the sky was too close to the sun near sunrise. I didn't see the first light of the new moon on the night of September 27 (.03 phase) even though it was clear because the sunset was too close to the moon set. The new moon for the Stockton, California area was thus on September 28 (.09 phase) even though it was too cloudy that day after sunset to see the new moon. It was thus 4 days after the last waning moon crescent that the new moon occurred.

## Postponements of Holy Days

cp233» Today the Jews adjust their calendar so as to have their holy days fall on certain week days:

- "But some slight adjustments will occasionally be needed for the reasons before assigned, viz. to avoid certain festivals falling on incompatible days of the week. Whenever the computed conjunction falls on a Sunday, Wednesday or Friday, the new year is in such case to be fixed on the day after .... If the computed new moon be after 18 hours, the following day is to be taken, and if that happens to be Sunday, Wednesday or Friday, it must be further postponed one day .... The Jews, to avoid celebrating 'Passover' on Monday, Wednesday, or Friday, observe 'New Moon' one day earlier or later than the date indicated by the Golden Number" (*Ency. Brit.*, 11th Ed., p. 1000; A. Spier, pp. 218-219; Bond, p. 264).
- "Further, the Jews, to avoid celebrating 'Passover' on Monday, Wednesday, or Friday, observe 'New Moon' one day earlier or later than the date indicated by the Golden Number... With these notes concerning the Hebrew Calendar, it will be obvious that a calendar to serve perpetually cannot be easily produced; but if we take the date of the new moon of the vernal equinox indicated by the Golden Number, according to the following tables, we shall be able to determine the date of the Jewish civil year, within a day, for the modern Jewish Calendar" (Bond, pp. 264-265).
- The postponements according to *The Jewish Encyclopedia* "were introduced to provide that the Day of Atonement should not be on Sunday or Friday ...

and that the seventh day of Tabernacles should not be on Saturday" ("Calendar").

- "The second complication is introduced to prevent certain dates from falling on the Sabbath. To provide the required flexibility, two months (*Cheshwan* and *Kislew*) may both have 29 days" (*Jewish Chrononomy*, by Leo Levi, p. 6, 1967).
- Spier lists four postponements of the calculated new year's day from the calendar's new year's day (p. 219).

Notice from the above that there seems to be no consistent explanation for the postponements. There is something superstitious about manipulating a calendar so that festival days only appear on certain days. We reject this as non-Biblical and we will not use it in order to determine Biblical dates. During Christ's time there were no postponements, for the festival of the Passover "could fall on any day of the week..." (Solomon Zeitlin, "The Judean Calendar During the Second Commonwealth, and the Scrolls," *Jewish Quarterly Review*, July 1966).

# Difference Between Astronomical, Golden Number's, and Observational New Moon

**cp234»** "The date of a new moon, indicated by any number of the Dionysian Cycle, or of the other cycles, differ from the date of the appearance of the new moon of the heavens..." (Bond p. 122, the date of Golden Numbers "indicate the *Calendar* New Moon").

**cp235**» And "it ought to be remarked that the new moons, determined in this manner [Golden Number method], may differ from the astronomical new moons sometimes as much as two days" ("Calendar," *Ency. Brit.*, 11th ed.).

# Difference Between Observational New Moons and Calculated New Moons

cp236» Most of today's new moon calculations and calendar new moons are based on calculations of the astronomical conjunction between the moon and the sun. The conjunction is about one to two days before the time the new moon's new crescent is observable by human eyes from the earth. "The most common termination / beginning point is the first visibility of the crescent in the evening; on observation of the crescent, the old month is deemed to have ended and the new month to have begun. So far as we can determine, all Greek calendars used first visibility of the crescent, as did, *inter alia*, Babylonian, Hebrew, and Moslem calendars" (see p. 14 *Greek and Roman Chronology*, Alan E. Samuel). The new moon can be observed at the very

earliest about 18 hours after the astronomical conjunction, while many say the *earliest* it can be seen is 22-24 hours after the conjunction. Jacob O. Meyer of the Assemblies of Yahweh, has based his churches' calendar on observation for many years and it is his belief based on his experience,

"that the new moon can rarely be seen less than 24 hours after the conjunction. Especially around the time of the spring equinoctial points, the length of time between conjunction to possible observation is greatly reduced. However, in the summer and fall of the year the length from the conjunction to the sighting of the moon is greatly lengthened.... Many factors enter into the subject of the new moon visibility...There must be sufficient light in the moon to mark its visibility as a crescent, the necessary length of time after sunset, with satisfactory twilight (darkness), and distance from the earth, etc.... Pinpointing the correct day when the new crescent visibility should occur is no easy matter..." ("How to Keep Time By Yahweh's Calendar in the Heavens," by Jacob O. Meyer, p. 7).

In many cases the new crescent is seen 1 to 2 days after the astronomical conjunction. In the July 11, 1991 conjunction, which was also an eclipse of the sun at about 11:20 AM (PDT), the new crescent wasn't seen in Tracy, California until about 8:50 PM (PDT) on July 12, or about 34 hours later, less than an hour after sunset. According to the *EZCosmos* PC program the moon was at the .02 phase. Of course, in other parts of the world this new moon may have been seen a little earlier or a little later than when I saw it near Tracy, California.

#### First Month

cp237» The Bible says that the month of Abib was for the beginning of the months of the year for Israel:

"This month shall be unto you the beginning of months; it shall be the first month of the year to you.... This day you came out (of Egypt) in the month of Abib." (Ex 12:2; 13:4; & see 23:15; 34:18; Deu 16:1)

cp238» It was *not* the beginning of the year cycle, because other scriptures tell us that the year began and ended in the Fall at harvest time (Ex 23:16; 34:22). The month of Abib was the beginning of the *count of months* for the new year of Israel that pointed to and celebrated Israel's entrance into the holy land, the promised land. In other words, the first

month was not at the beginning of the year but someplace within the yearly cycle; the first month pointed to the first month Israel entered the promised land. This may be confusing at first, but do read on to better understand this (see New Year's Day below).

#### cp239» Notice Deuteronomy 16:1:

Observe [watch for] the month of Abib and celebrate the Passover to the LORD your God, for in the month of Abib the LORD your God brought you out of Egypt by night.

This scripture asked Israel to watch for and observe the month of Abib, that is the new moon of Abib, for the word "month" was translated from the Hebrew word, *kodesh*, that meant, *new* moon or month depending on context. The word "Abib" means young ears or fresh ears, and from the context where it was first used, it means the time of the young ears of barley: "For barley was in the ear" (Ex 9:31-32). "In the ear" is a translation of the Hebrew word, abib, which is the name of the first month of Israel's calendar mentioned in the book of Exodus. In context, it means young or fresh ears of barley. At the time Israel came out of Egypt the wheat and the rye had not yet ripened enough to be destroyed by the plagues (Ex 9:32, 31). What this means is that the beginning of the first month for Israel was when the barley was beginning to become ripe. Since barley becomes ripen enough to harvest in the southern parts of Israel in early April, then the young ears appeared a week or so before this. Therefore Abib or the first month of Israel's calendar should not start before about March 20-21. There is room for some interpretation here, so we must be careful when we attempt to translate the start of the year in the old days or for that matter predict the start of the year in the future. Because twelve months of lunarcalendar year is shorter than the solar-calendar year, the beginning of Israel's months moved forward about eleven days each year until about every third year they had to add a second twelfth month.

## New Year's Day

cp240» In order for Moses's new count of months for the year to be *new* there must have been a different Hebrew or Israelite count of months before this one (Ex 12:1-3). The old year began in the fall (Sept-Oct). Even today the Jews celebrate the New Year as beginning on *Rosh Hashanah* or the first of Tishri (Spier, p. 10). The month *Tishri* is the seventh month of Moses' *new* count of months. But before Moses the count of months started in the Fall. The month "Tishri" corresponds to our September-October period. This is confusing. The New Year's day for the year is the first day of the *seventh* month of Moses' new Hebrew Calendar, not the first day of the first

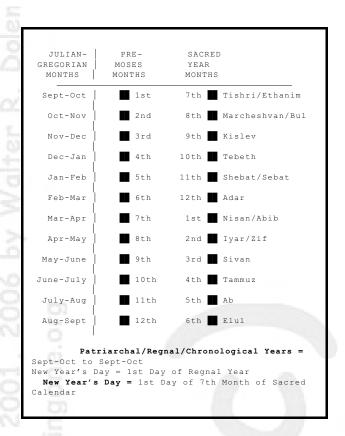
month of Moses' new calendar. But before Moses the New Year's day was the first day of the first month (Gen 8:13 cf 7:6, 11 & Biblical Chronology under "1656 YM"), and began in the Fall. But from Moses onward, because Moses changed the months, the New Year's day was the first day of the seventh month of the Sacred Calendar. The confusion is caused because Moses initiated the Sacred Calendar or Religious Calendar while Israel still kept its old civil calendar, but only used it for counting years. The table below may help you to understand this.

## Civil Years and the Religious Calendar

cp241» There is a distinction between the Old Testament's Hebrew Civil or Regnal year and their Religious or Sacred year. Civil years are from Tishri to Tishri (Fall to Fall), that is, from the seventh month to seventh month. But the seventh month is the seventh month of the religious calendar. The religious calendar was from the first month (Abib or Nisan) to the first month of each religious year, or more correctly from the first day of the first month through the last day of the last month. The civil year or regnal year for the Old Testament's Jews started from the first year of man, but the religious calendar started from Moses (Exo 12:1-3). This Old Testament civil year should not be confused with the contemporary civil year of many Jews — the Julian-Gregorian calendar year — which begins on January the first (also see *The International Standard Bible Ency*. [1915], under "Calendar"; Unger's *Bible Dict*, "Calendar"; etc).

#### Names of Months

**cp242»** In Moses' time this first month was called, *Abib* (Exo 13:4; 23:15; 34:18; Deut 16:1). But in the time of Nehemiah and Esther the first month was called, *Nisan* (Neh 2:1; Est 3:7). Most of time the first month was called not by name but by the number of the month, the *first* month (Exo 12:2, 18; Lev 23:5; Num 9:1; 33:3; Josh 4:19; 1 Chr 12:15; 27:2; 2 Chr 29:17; 35:1; Ezra 6:19; Est 3:12; Ezek 29:17; Dan 10:4). In the book 1 Chronicles chapter 27 the twelve months are not called by their names but by their numbers: first month, second month, third month, etc. This first month of Moses' year corresponds to the Julian-Gregorian calendar's March-April (see Unger's *Bible Dict*, "Calendar"). This first month is the same first month, *Nisan*, that the Jews today observe (*The Comprehensive Hebrew Calendar*, by A. Spier).



## Significance of the New Year's Day

cp243» The count of years for the patriarchs and the kings of Judah started with the first New Year's day they ruled on. This New Year's day is Israel's Civil New Year's day, not their religious year. It was on this day that Israel had a festival — Feast of Trumpets (Num 29:1ff; see Unger's *Bible Dict*, "Festivals"). But Israel did not have a festival for the beginning of the Sacred Calendar. In most if not all ancient cultures there was a festival or holiday for New Year's day (*Ency. Brit.*, 15th Ed., 1985, "Rites and Ceremonies: Feasts and Festivals," Vol 26, p. 881ff). In some of these cultures the king was sanctified by the high priest for the new year on the New Year's day festival (see D.J. Wiseman, *Nebuchadrezzar and Babylon*, pp. 19, 21; A.T. Olmstead, *History of the Persian Empire*, pp. 36, 86-87).

#### Cardinal v. Ordinal Numbers

cp244» Some make a clarification between the cardinal numbers and ordinal numbers. They say that cardinal numbers are such numbers as "one," "ten," or "one-hundred." They say they have full value. Thus if a king is said to rule five years, because "five" is a cardinal number, then this king must have ruled five full years. But ordinal numbers such as "first," "tenth," or "one-Hundredth" do not have full value. According to this theory, the tenth year of a king means he has only ruled nine full years and is in his tenth year.

**cp245**» But it should be noted here that some numbers in Hebrew are used as either cardinal or ordinal numbers:

- "In numbering days of the month and years, the cardinals are very frequently used instead of the ordinals even for the numbers from 1 to 10,"...
- The *ordinals* above 10 have no special forms, but are expressed by the corresponding cardinals," ...

(Gesenius' *Hebrew Grammar*, 2nd Eng Tran, 1910, 1980 reprint, Section 128p & 128o)

cp246» For example in 1 Kings 6:1 it reads in the Hebrew, "in the eighty year and four hundred year," and not in the eightieth year and four hundredth year, or in the four hundred and eightieth year. It has been translated by English translators as, "in the four hundred and eightieth year." Thus the 480 years (cardinal number in Hebrew) was translated in English as an ordinal number: 480th. Why? Because it sounded better; it was better English; or because of context. So to make a great deal about ordinal or cardinal numbers in chronology is projecting one's lack of knowledge of the Hebrew text: "the *ordinals* above 10 have no special forms, but are expressed by the corresponding cardinals."

## **Absolute Dates**

#### **Economic Cuneiform Tablets**

cp247» Although economic or business cuneiform clay tablets (legal documents) had dates of kings ("in the 21st year of Nabopolassar" or only, "in the xxth year," with no king's name), they in most cases did not mention the year of reign of another king of another kingdom because most of these legal documents

of business were only pertinent to one kingdom in one year of reign of some king of that kingdom. They also did not give the total years of reign of the kings mentioned. Thus when using cuneiform business tablets as evidence for chronology, it becomes a game of which king follows which king, and only some supposed correct list of kings such as Ptolemy's gives conventional chronologists the idea they *know* which king follows which king (note *Babylonian Chronology 626 B.C.-A.D. 75*, by Parker and Dubberstein, pp. 10, 18, 24, note 10 pp 4-5).

cp248» It is on very rare occasions such as in the Bible where the reigns of the kings of Judah and Israel are sometimes both mentioned (books of Kings and Chronicles) or the place in the Bible where the year of reign of both Nebuchadnezzar and Jehoiakim are mentioned (Jer 25:1) that a real chronology can be built. It is through this scripture that we can connect the Biblical chronology with Babylonian chronology, thus to secular chronology.

## Connection Between Biblical and BC-AD Dates

#### From the End of Judah's Kingdom

cp249» Secular Evidence Used. The 11th year of Zedekiah (3406th Year of Man) marked the end of the kingdom of Judah. From this point to Christ's time and the Christian Era system of dating we must rely on secular evidence, especially astronomical cuneiform tablets and retro-calculation of past celestial movements.

cp250» Before we can even attempt to find the date of Christ's birth or find out which year of man (YM) we now live in, we need to connect the Year of Man system of dating to the Christian Era system. The method of connection is principally through two astronomical cuneiform tablets. One can be dated 568 to 567 BC and the other can be dated from 523 to 522 BC.

cp251» Both of these tablets note a year of a king and both mention certain dates, month and day, and various astronomical events that happened on these dates. These tablets mention moon positions, eclipses of the moon, and both mention position of planets. I have studied these tablets and I have used computer programs to calculate the various years in which the position of the planets and the eclipses could have occurred in the past. I have found that the astronomical tablets can only describe the year in which they have been assigned by the experts. Because of the number of planets mentioned, because of the eclipses mentioned, because of the paths of the planets,

sun, and moon since the time of the tablets, I believe these two tablets do identify ancient **absolute dates** and do connect our system of dating to the Biblical and Babylonian system of dating.

cp252» If I had to trust the few experts alone to calculate and identify these tablets, I would be less assured that these tablets were identifying absolute dates. It is because the latest methods of calculating past position of astronomical bodies are available on personal computers, because I spent weeks using my computer checking every conceivable way of disproving these dates, and because I examined the translation of these tablets, I have changed my opinion and now believe that the Biblical chronology can be linked to secular chronology through the use of these absolute dates.

## Two Clay Tablets

cp253» After years of studying chronology since 1969, and after I had come to the conclusion about 1979 that Ptolemy's chronology was too dubious to rely on, I was at a loss for a method to connect my Biblical chronology with the Christian Era system (BC-AD system). I had studied eclipses and I had found that you could not identify a date with only one eclipse, especially the vague historical eclipses found in various texts (see, CP2). I had also studied various astronomical cuneiform tablets, but the ones I was aware of did not seem to hold the answer to finding an absolute date. In my studies I had read several books by Robert R. Newton and had found them very helpful. But in 1987 I read *The Crime of Claudius Ptolemy*, first published in 1977. In it Newton mentions two clay tablets. One is dated 523-522 BC, in the 7th year of Cambyses, and the other dated 568-567 BC, in the 37th year of Nebuchadnezzar. They were identified with these dates because of the astronomical information included within these tablets.

**cp254»** Concerning the tablets dated 568-567 BC, Newton said, "I find that the times of moonrise and moonset agree with calculated values within 10 minutes. The longitudes of the moon and planets inferred from the conjunctions agree with calculated values within 1 degree or less for most observations, although there is a discrepancy of 3 degrees for one lunar conjunction" (*Crime of* ..., p. 375).

**cp255**» Although Newton wasn't as satisfied with the tablet for the 7th year of Kambyses (Cambyses), he stated:

"Thus we have quite strong confirmation that Ptolemy's list is correct for Nebuchadrezzar, and reasonable confirmation for Kambyses" (*Crime of...*, p. 375).

**cp256»** After reading this I began my search for copies and/or translations of these tablets. I wrote Newton for any further information he might have, but he could not supply any except to note that he believed that the tablets were correctly dated and that they could not describe any other date within decades of the identified ones (letter, Dec 23, 1987).

cp257» I finally obtained copies of these tablets and used several computer programs to check them. In my studies I have found that they could not have been any other date: the position of the planets were unique to the years assigned to them.



## Clay Tablet # 1: Tablet VAT 4956

37th Year, 568-567 BC

**cp258»** The tablet that describes the 37th year of Nebuchadnezzar and various planet positions within that year is the cuneiform tablet known as

VAT 4956. Thave a copy of the autograph of this tablet made by E. Weidner which is found as Plate XVII in Archiv Fur Orientforschung, Band XVI, 1953. It is also transcribed and discussed by P.V. Neugebauer and E. Weidner in Ber. Sachs. Akad. 67 (Leipzig 1915) and is cataloged in A.J. Sachs' Late Babylonian Astronomical And Related Texts, 1955, page xii. The "VAT" before the number of the tablet (VAT 4956) means this tablet is in Berlin in the Staatliche Museen (Sachs, p. xxxix). I also obtained an English copy of VAT 4956 from the University of California at Berkeley in 1997 from the



book, *Astronomical Diaries and Related Texts From Babylonia*, by Abraham J. Sachs, Volume I. Also on various pages in Robert R. Newton's 1976 book, *Ancient Planetary Observations* ..., Newton has information on the data from this tablet (*Ancient Planetary Observations* ..., Newton; pp. 110, 131-141, 145, 336, 345, 348, 352, 503, 511, 513, 519, 524).

**cp259**» This document records among other things, "9 measurements of the times of moonrise or moonset, 5 times of conjunctions of the moon with specified stars, plus 1 conjunction of Mercury, 2 of Venus, and 3 of Mars, all with specified stars" (Newton, 1977, p. 375).

### Names of Kings in Clay Tablets

cp260» This document *does* mention Nebuchadnezzar by his full name. It begins with "year thirty seven [of] Nebukadnezar" The tablet uses wordsigns or Ideograms for Nebuchadnezzar's name. These word-signs are not from the Akkadian language, but from the Sumerian language. Before April 7, 1997, when I obtained an English copy of VAT 4956, I could not identify Nebuchadnezzar's name in the tablet because I was only looking for Akkadian words in my copy of the clay tablet. I thought wrongly that some abbreviation was used in the tablet, and thus the reason I could not find the king's name. Abbreviations were used often in ancient texts:

"The scribe uses, with the exception of writings A-lik-sa-andar and Pi-lip-su, abbreviations to refer to the kings. Thus Seleucus is consistently written Si and Antiochus An, Demetrius Di and Arsaces, probably, Ar; in line 5 Alexander is rendered by A-lik. The translation uses the full names with the ordinals and the identifying Greek by-names for the convenience of the reader" (*The Ancient Near East: Supplementary Texts and Pictures Relating to the Old Testament*, Edited by James B. Pritchard, 1969, page 131 [567] footnote 1).

But Nebuchadnezzar's name is in the tablet: at least four times. On an edge of the tablet it also mentions the 37th year and the 38th year of Nebuchadnezzar. In astronomical tablets, one will more than likely not find the name of the king: you would find the year of the king, but not the name of the king. Many astronomical tablets are and were identified as to BC-AD year by the astronomical information within the tablet and through calculation (Sachs, 1955, p. vi), not by any king's name within it.

# Clay Tablet # 2

### 7th Year, 523-522 BC

**cp261»** The tablet that describes the 7th year of Kambyses (Cambyses) and various astronomical positions is found in Franz Xaver Kugler's *Sternkunde und Sterndienst in Babel*, published in 1907, pages 70-71. Some information on this tablet is found in Newton's 1976 book (pp. 110, 131, 135, 139, 144, 503, 513, 523, 711-715).

**cp262»** I have a copy of Kugler's work on this tablet. On page 70 is the transliteration, and on page 71 is the German translation. This tablet lists two eclipses of the moon, conjunctions or near conjunctions of Mercury and

Venus, Saturn and Venus, Mars and Jupiter, Saturn and Jupiter, Venus and Jupiter, Moon and Mercury, Moon and Jupiter, and positions of Jupiter, Venus, Saturn, and Mars in relationship to stars or star constellations (Virgo, Leo, etc.).

### **Identification Process**

### Software and Books

**cp263**» I used the following computer programs for an IBM PC computer to analyze the information on these two tablets:

- Tables for the Motion of the Sun and the Five Bright Planets from -4000 to + 2800, Supplemental Programs (Willmann-Bell, Pub.), by Pierre Bretagnon and Jean-Louis Simon, 1986.
- Newcomb and Gnewcomb, David Eagle, 1988 (Willmann-Bell).
- *EclipseMaster*, 1987, Zephyr Services.

I used the following to further analyze the information:

- Canon of Lunar Eclipses -2002 to +2526, by Jean Meeus and Hermann Mucke, 1979.
- Smithsonian Contributions to Astrophysics, 5,000 and 10,000 year Star Catalogs, by Gerald S. Hawkins and Shoshana K. Rosenthal, 1967.
- Ancient Planetary Observations and the Validity of Ephemeris Time, by Robert R. Newton, 1976.

### Findings of Study

cp264» First I found both tablets to be properly dated, not because of the lunar eclipses, but because of the numerous planet positions. One lunar eclipse would be too vague to date any event (see CP2). Two lunar eclipses would help more to identify a year. But the numerous planet positions were the clincher. The position of planets as seen from the earth repeat themselves every so many months or years. This is called the synodic period of planets.

### Planets' Orbits Repeat

cp265» Mercury returns every .31726 years or 3.9241 months to the same place in the background of the same stars as seem from the earth. Venus repeats every 1.59872 years or 19.7742 months. Mars repeats every 2.13539 years or 26.4121 months. Jupiter repeats every 1.09211 years or 13.5080 months. Saturn repeats every 1.03518 years or 12.8039 months (Newton, 1976, p. 101). 145 synodic periods of Mercury comes to an almost even 46 years (46.003). Five synodic periods of Venus comes to an almost even 8 years (7.994). 22 or 37 snyodic periods of Mars comes to an almost even 47 years or 79 years (46.979 or 79.009). 65 or 76 snyodic periods of Jupiter comes to an almost even 71 or 83 years (70.987 or 83.000). 57 snyodic periods of Saturn comes to an almost even 59 years (59.005).

### **Synodic Periods**

cp266» Both tablets list a date, month and day, with the year. In order to identify the year of the tablets in the Christian Era system, we need to understand the pattern or synodic period that repeats itself in whole years. Venus returns every 8 (7.994) years to the same apparent position among the stars of the sky as seen from the earth on a specific date of the solar year. Thus, if we know a Julian or Gregorian (not a Babylonian) date (month and day) in a clay tablet where Venus was observed near "x" star, but do not know which Julian year it is, we know that Venus will return each 8 solar years to the same position in the sky.

### **King Lists**

cp267» If we have other information in the tablet such as a year of a king along with a reliable king's list we can by a hit and miss method move this sighting eight years at a time until we fit this tablet into its proper place in history. But if the tablets we are studying do not list the name of the king with the year, it will be more difficult. One of these tablets did not name the king, but it did mention the year (7th) of some unknown king. The most used kings list for this period is Ptolemy's. We can not absolutely trust Ptolemy's kings list (CP2). Therefore we can only use his list tentatively. But there are also the Assyrian king list, the Uruk King list, and the Seleucid King list, as well as the tablet of the mother of Nabonidus (*The Ancient Near East: Supplementary Texts and Pictures Relating to the Old Testament*, James B. Pritchard, 1969, pp. 560-562, 564-567; see CP2). Using all these lists helps us to get a good idea of the length of years of the kings of this period.

### **Tablet Contents & King Lists**

cp268» We know by the language of the clay tablets, the way they were written, in context with previously found astronomical tablets, that these two tablets can roughly be dated (A.J. Sachs, *Late Babylonian Astronomical and Related Texts*, p. xii ff; A.K. Grayson, *Assyrian and Babylonian Chronicles*, pp. 12, col 2). Furthermore, we can know specifically the date of the tablets by the astronomical information within them (see below). One tablet has the name of the king, Nebuchadnezzar. To find the name of the other king we can use the various king lists of this period and the Assyrian and Babylonian Chronicles to ascertain how many kings reigned for at least 7 years. By this method we narrow down the possible kings that the tablets may belong to only Cambyses.

**cp269**» As mentioned before these tablets contain planet positions for specific dates. Since the position of planets like Venus repeat their position every so many years, by knowing these synodic periods in whole years, we can further narrow down the years.

### **Lunar Eclipses**

**cp270»** These tablets also contain reports of lunar eclipses, and since eclipses only repeat themselves every so often, this information also enables us to narrow down the year of the tablet (CP2).

### **Planet Positions**

cp271» But not only did these tablets report on lunar eclipses, and one planet position with specific dates (month and day), these tablets report on *many* planet positions. By ascertaining through retro-calculation the position of these planets on certain dates, we narrow the dates down to the exact year in the Christian Era system. For example the 523-522 BC tablet contains several positions of the planets Jupiter, Venus, Saturn, and Mars during this time period. Jupiter repeats its synodic period every 71 (70.987) or 83 solar years. Venus repeats itself every eight years. Saturn repeats itself every 59 years. And Mars repeats itself every 47 (46.979) years. These four planets will all be in the same position in relation to themselves and the stars on the same solar date approximately every 1,575,064 years. But this tablet also contained seven reports of near conjunctions of two planets. This would also greatly increase the odds that the astronomical phenomena reported on the tablet would be unique in history.

### **Babylonian Calendar**

**cp272»** It also should be remembered that the dates given were from the Babylonian calendar, which was a lunar-solar calendar. It does not correspond to our solar calendar. This again would increase the odds of finding another year in history that would have the same planet positions as reported in the tablets.

### **Other Planet Conjunction Patterns**

**cp273**» In the 523-522 tablet it mentions seven near conjunctions of two bodies:

Moon and Mercury; Moon and Jupiter; Venus and Jupiter;
 Saturn and Jupiter; Mars and Jupiter; Saturn and Venus; and
 Mercury and Venus.

cp274» The tablet speaks of these pairs of planets being so many degrees (ammat or uban which equal about 2 to 2 ½ degrees) away from each other. Concerning these conjunctions, the tablet does not report the position of the planets in relationship to the stars. These conjunctions have only to do with the nearing of the two planets together irrespective of their position among the stars at the time of their conjunction. This gives us a different possible period of repetition. Using the computer programs I found that the periods that these conjunctions repeated themselves to be approximately:

Venus and Jupiter

13 months; 11 months; 26 months; 30 months, 40 months; 10 & 14 months; 20 months; 15 months; etc.

Saturn and Jupiter

20 years

Mars and Jupiter

26 months

Saturn and Venus

14 months; 10 months; 14 months; 13 months; 10 months; 14 months; 11 months; 11 months; 12 months; 14 months; 15 months; 16 months; 16 months; 17 months; 18 months; 18 months; 19 months; 19 months; 19 months; 10 months; 11 months; 11 months; 11 months; 12 months; 11 months; 12 months; 13 months; 14 months; 15 months; 16 months; 17 months; 18 months; 19 months; 10 months;

Mercury and Venus

1 year; 2 years; 19 months; 8 months; 9 months; 28 months; etc.

**cp275**» Because of the apparent non-synchronizing of these conjunctions, it adds more weight to the identification of the dates of the tablets.

cp276» By using and comparing the length of king's reigns in the Uruk King list, the king list in the tablet of Nabonidus's mother, the Babylonian chronicle, the Ptolemy's king list between Nabopolassar and Darius II (because of the economic tablets found in this time period), various other tablets and monuments concerning the Persian kings (Anstey, pp. 260 ff), and because of the 70 years prophecy (see CP5), we can conclude that the tablets dated astronomically and dated through the comparison of king lists and lengths of kings reigns, are correctly dated to the right Julian years and to the right Kings.

cp277» Also the Seleucid King list (Pritchard, 1969, pp. 566 ff), the dated astronomical diaries (Sachs, pp. xii ff), the so-called "goal-year" texts (Sachs, pp. xxv ff), and other texts give us the rough information on the years of the kings.

cp278» Our contention with Ptolemy's list is not the *general* number of years between Nebuchadnezzar's time to Darius II, but his king list before Nabopolassar, and the kings after Darius II, because of the lack of pertinent cuneiform tablets between Nebuchadnezzar and Christ's time. It is not clear from the Bible the names of the kings and the order of their reigns after Cyrus (see the Bible books: Ezra, Nehemiah, Esther, Daniel).

# **Astronomical Chaos**

cp279» Another aspect to consider is astronomical chaos. There was a book published in 1950 that caused an emotional outburst from many who called themselves scientists. The book was by Immanuel Velikovsky. The book's name was *World's in Collision*. It told the story of apparent astronomical chaos, world's in collision, planets or planet-comets off their present orbits. Some felt Velikovsky's book was somewhat convincing in parts, but not very scientific in whole. Velikovsky used many sources of information, synthesizing them into a story of astronomical chaos. He took information from cuneiform tablets and classical historians. But he also took information from literature classified as myth, and from the Bible. We don't classify the Bible as myth, but some unknowingly do.

### Gods, Stars and Chaos

cp280» What Velikovsky reported was the numerous stories in ancient sources about astronomical chaos, of war in the heavens between planets or planets and comets. Some stories were open and obvious; some were hidden in poetry. Homer in his *Iliad* wrote poetically about the gods and their fights in the heavens. In the Sumerian and Akkadian languages the word or sign for god (an or DINGIR) was used in front of the names of stars. This indicates that stars were gods according to their mindset. According to Plato stars were gods, "stars which are living creatures divine and eternal" (Plato, *Timaeus* Loeb Classical Lib, No. 234, p. 85). It was common for Greeks to call all heavenly bodies "stars" (Gk. aster) even the sun and moon. Planets were the wandering stars, and what we call stars they called "fixed stars" (Newton [1977] p. 2-3; Ptolemy's *Almagest*, trans. Toomer, p. 21). Plato called the stars, "gods" (*Timaeus* p. 87, & footnote 3). Thus, the gods warring in the heavens were the planet-stars warring against each other in the heavens.

### cp281» In Plato's own words:

There have been and there will be many and divers destructions of mankind, of which the greatest are by fire and water, and lesser ones by countless other means. For in truth the story that is told in your country as well as ours, how once upon a time Phaethon, son of Helios, yoked his father's chariot, and, because he was unable to drive it along the course taken by his father, burnt up all that was upon the earth and himself perished by a thunderbolt,—that story, as it is told, has the fashion of a legend, but the truth of it lies in

the occurrence of a shifting of the bodies in the heaven which move round the earth, and a destruction of the things on the earth by fierce fire, which recurs at long intervals" (Plato, *Timaeus*, pp. 33-35, my emphasis).

cp282» Ancient sources told the story of an unstable universe. In the past people were aware of the previous periods of the unstable universe. Ancient writers openly and poetically wrote of this universe. Velikovsky and others gave evidence of changes in ancient calendars (Velikovsky, Worlds...., Chap. 8; E.A. Wallis Budge, The Book of the Kings of Egypt, Vol 1, p. XLV ff). What this means is that the orbits of the moon and the earth have changed; the calendars changed to reflect the orbit changes. At least two to four major changes have occurred in the past. Because of these changes astronomical retrocalculation before these orbit changes are impossible. We will not analyze the pros and cons of astronomical chaos. It would be too long and complicated for this paper. We will refer you to some books and journals. They make for interesting and informative reading:

- Immanuel Velikovsky, Worlds in Collision;

  Earth in Upheaval;

  Ages in Chaos;
- Alfred de Grazia, Ralph E. Juergens, and Livio C. Stecchini, *The Velikovsky Affair*;
- Donald W. Patten, Ronald R. Hatch and Loren C. Steinhauer, *The Long Day of Joshua and Six Other Catastrophes*;
- Donald W. Patten, Catastrophism and the Old Testament (Seattle: Pacific Meridian Pub., 1988);
- Donald Wesley Patten, *The Biblical Flood and the Ice Epoch*;
- Kronos, a journal, all volumes;
- Pensee, a journal, all 10 volumes;
- Cosmos and Chronos, a journal, all volumes;
- Creation Research Society Quarterly, a journal, various articles from time to time;
- William H. Stiebing, Jr., *Ancient Astronauts; Cosmic Collisions*, pp. 57-80, a critique of Velikovsky's work.

cp283» In our chronology we rely on Biblical and secular sources, with Biblical sources given the upper hand. In the Bible there are many references to catastrophic events that were from astronomical chaos. Reading these catastrophic scriptures with the point of view that they may be astronomical in nature makes many of these puzzling scriptures come

alive. I am inclined to believe there has been astronomical chaos, with the flood, the Exodus, and other events being a part of this chaos.

### Israel's God did All: Good and Bad

cp284» The people of Israel interpret all events as coming from God, the good ones and the bad ones (see *God Papers*; "God's Wrath" papers). To the Hebrews good events happen because people were good; bad events happen because they were bad. But Christ, Paul, and Peter said this was not necessarily so (Luke 13:1-4; Rom 11; 8:17; 1 Pet 2:21-22; 3:14, 17 ff; 4:1; see "Joy" section in NM18). To the Hebrews when the skies rained fire and brimstone it wasn't because of astronomical chaos, it was because God was punishing the bad. When the sun apparently went down 10 degrees, it wasn't because of astronomical chaos, it was a sign from God. See the *God Papers* and "God's Wrath Papers" to understand more about the Hebrews attributing almost all things good and bad to God.

cp285» The assumption that present orbits have been stable for a long time is not scientific, especially in light of historical writings to the contrary. The present "laws" of orbits are nothing but *mathematical descriptions* of the present orbits with small adjustments (secular terms) for past variations. They tell us little about orbits 3,000 years ago. The theory of astronomical science that the orbits were stable thousands of years ago is based on linear thinking. But a new branch of science called the science of chaos is projecting the naivete of linear thinking (James Gleick, *Chaos: Making a New Science*, 1987; see my *Science Papers*).

cp286» Hailstones and brimstones mixed with fire falling from heaven or the sky are reported in the Bible. These stones came out of the sky either from a comet or planet-comet that came close enough to the earth to cause chaos on the earth and in some cases to cause great earthquakes and cause our volcanoes to erupt. They may even have caused the earth to stand still or appear to stand still, or in some way, have turned the earth upside down, reversed temporarily the apparent movement of the cosmic bodies, or caused a reversal in the magnetic polarity, etc. [The Hale-Bopp comet coming our way (this was written on 9-23-95) was last here about 3000 to 4000 years ago. Was it this comet or others like it that caused the chaos thousands of years ago?]

### **Examples of Past Chaos**

### cp287» Brimstone and/or hailstones and fire from heaven

Genesis 19:24-29; Exodus 9:18-19,22-25; Joshua 10:11-14; Isa 28:2; Isaiah 30:30 cf 37:36 with Isa 38:8 and see Velikovsky *World's* ... Part 2, Chap 2;

### Great earthquakes

Isaiah 24:13, 18-20; Amos 1:1; Zech 14:5;

### Sun, Moon, and Earth in chaos

Joshua 10:11-14; Isaiah 24:1, 20, 23; 2 Kings 20:8-11; Isa 38:8;

### Mountains and valleys lifted up and down

Psalm 104:8 see Hebrew or margin in Bible; an effect of the Flood and astronomical chaos

### The Flood and collapse of the waters above the earth

Genesis 1:6-7 compare with Genesis chaps. 7 & 8; see CP5 under "1656 YM"; an effect of cosmic bodies coming too close to the earth

*Rocks*. You can travel through the land in and around Israel and through various parts of the United States, especially the desert area between California and Texas and see rocks that look just like the rocks seen on Mars (same sizes, same color, same texture) as photographed by the Viking 2 lander (*Science News*, Vol. 110. No. 11, Sept 11, 1976, "Viking 2's View of Utopia: A Rock-Strewn Martian Plain," pp. 164 ff; Time-Life Books [editors], *The Near Planets*, 1989, pp. 122-124; etc.) Some of these may be the "hailstones" or "brimstones" of the Bible caused by the interaction of Mars and/or Venus or a comet or a shattered cosmic body with the Moon and the Earth.

*Moon's Craterous Face*. The past chaos in the solar system is revealed by the moon's surface: crater-like formations.

**Rocks from Moon and Mars.** "Scattered across the frozen plains of Antarctica lie thousands of mysterious rocks, some as small as olives, others as large as grapefruits. Geologists believe that many of the stones are from the moon and some perhaps from Mars.

'We are certain that these samples are from the moon,' University of Pittsburgh geologist William Cassidy said at a recent International Geological Congress session. The chemical composition of many of the rocks matches that of moon rocks gathered by the Apollo astronauts....

In all scientists have gathered more than 12,000 Antarctic rocks, and two in particular, known as shurgities, remain especially puzzling. Cassidy says they might have come from Mars but notes that no one will know for sure until scientists can compare them with rocks brought back from that planet" (*Insight*, August 21, 1989, p. 50).

Reversal of the Magnetic Poles. There is evidence of reversals of the magnetic poles of the Earth, moon, and even Mars. These reversals indicate past cosmic chaos (Kenneth A. Hoffman, "Ancient Magnetic Reversals," Scientific American, May, 1988, pp.76-83, 126; Arthur Fisher, "What Flips Earth's Field," Popular Science, Jan. 1988, pp. 71ff; S.K. Runcorn, "The Moon's Ancient Magnetism," Scientific American, Dec. 1987, pp. 60ff; Thomas G. Barnes, Origin And Destiny of The Earth's Magnetic Field, 1973, ICR, San Diego; J.A. Jacobs, Reversals of The Earth's Magnetic Field, Adam Hilger, Ltd., 1984; David Gubbins, "Mechanism For Geomagnetic Polarity Reverals," Nature, March 12, 1987, Vol 326, No. 6109, pp. 167-169). For example, "the moon once had its own magnetic field, and a remarkably strong one. At one time the moon's field may have been nearly twice as strong as the present-day magnetic field of the earth...it seems that the body of the moon as a whole, has shifted several times in relation to its own axis of spin. The spin axis has preserved its orientation and position in space, but the moon itself has rotated in such a way that regions that were once at the poles (where the spin axis intersects the surface) are now closer to the equator" (pp 60-61, "The Moon's Ancient Magnetism," Scientific American, Dec 1987).

# **Other Important Information**

### Names: Kings Who Had More Than One Name

### Different Kings With The Same Name

cp288» The Judaean king Jehoiachin of the Bible is also called Jeconiah and Coniah (2 Kings 24:8; 1 Chron 3:16; Jer 24:1; Jer 22:24). The Judaean king Eliakim's name was changed to Jehoiakim (2 Kings 23:34). The Judaean king Mattaniah had his named changed to Zedekiah (2 Kings 24:17). Daniel and Abram, although not kings, had their names changed to Belteshazzar and Abraham. Most Egyptian kings had at least five names: a throne name, a personal name, and epithets (*Ages in Chaos*, p. 234; see "Kings Names" in CP2 of this paper). Furthermore, the cuneiform tablets can be read both ideographically and syllabically: Nergil can become Muwatallis (Velikovsky, *Ramses II and his Time*, pp. 101-102; quoting from Delaporte, *Les Hittites*; see *An Akkadian Grammar*, 1984 printing, p. 10).

cp289» Also each country or language had it own name for the other nation's kings: Nabopolassar was called Belesys (Diodorus, II, 24) and Bussalossor (Abydenus) by Greek authors, Merosar by Egyptians, and in Babylonian Bel-shum-ishkun and Nabopolassar (Ramses, p. 102). For "Darius, King of the Persians — Darayawaush, Dorejawosch, Dara, Darab, Dareios are variation of his name in different languages..." "I have learned from the Zend-Avesta (a collective term for the sacred Persian writings) that the name Hystaspes was pronounced Goschasp, Gustasp, Kistasp, or Wistasp in Persian" (Gods, Graves and Scholars, by C.W. Ceram, pp. 268, 266; see Chap. 19 & 20).

cp290» Furthermore, kings of different nations had kings with the same name in the same time period: in the same time period there were two kings called Jehoram for both Judah and Israel and two kings called Ahaziah for both Judah and Israel.

**cp291»** Also some nations had their kings *apparently* alternating the throne names of their kings almost every other generation: Darius, Cyrus, Cambyses, Xerxes, and Artaxerxes of the Median and Persian empire (James B. Pritchard, *The Ancient Near East* [1958], p. 207; Martin Anstey, *Chronology of the Old Testament*, p. 260 ff).

# Same Language Sign, Different Sounds; Different Sounds, Same Language Sign

cp292» The language called today, Akkadian, which earlier this century was called Assyrian or Babylonian-Assyrian, was like an international language in the Middle Eastern region. Thus from king lists or chronicles written in Akkadian on clay tablets found in the last 130 years, we today learn about the history of Egypt and the other nations of the region. But there is a great vagueness to the Akkadian script. In one sense it was like a shorthand script. Many signs in Akkadian represent the same sound: these are "homophonous signs."; and one cuneiform sign or symbol can represent a number of different values: these signs are called "polyphonous signs" (A Manual of Akkadian, David Marcus, 1978, p. 4 & 15). "When dealing with a polyphonous sign the correct value must be selected for the transliteration. This is determined by elimination based on vowel and consonantal harmony, and on a knowledge of the grammar and the lexicon" (p. 15). "Cuneiform uses word-signs frequently and many of its syllable-signs have several possible phonetic values. Only the advanced student, with the help of his grammatical knowledge, can select the correct reading from a plethora of possibilities by eliminating what is grammatically possible" (An Akkadian Grammar, 1975, p. ii, see pp. 9-11).

cp293» One cuneiform sign can be translated as *pe*, or *pi*, or *wa*, or *we*, or *wi*, or *wu*. "The above list [in King's book] will be somewhat simplified by observing that the same signs are employed for *ab*, *ib*, *ub* and for *ap*, *ip*, *up* respectively; that the same signs are employed for *ag*, *ig*, *ug*, for *ak*, *ik*, *uk* and for *ak*, *ik*, *uk*; that the same signs are employed for *ad*, *id*, *ud*, for *at*, *it*, *ut*, and for *at*, *it*, *ut*; and that the same signs are employed for *az*, *iz*, *uz*, for *as*, *is*, *us* and for *as*, *is*, *us*" (L.W. King, *Assyrian Language*, p. 57, pub. 1901). What applies to the Babylonian-Assyrian languages (Akkadian) also applied to other languages written in cuneiform:

"The principle of using several signs to represent the same sound (gu) is called homophony, and giving one sign several values (like KA) is called polyphony. Both principles are fundamental features of cuneiform writing throughout its 3,000 year history" (*Cuneiform*, C.B.F. Walker, 1987, p. 12).

Thus concerning Woolley's book on Ur, "A similar advance has occurred in the understanding of the Sumerian language and the names given today to the persons whose tombs Woolley excavated are no longer those he used in his text. Shub-ab is actually Pu-abi and the later Neo-Sumerian kings Dungi

and Bur-Sin are Shulgi and Amar-sin" (Shirley Glubok, *Discovering the Royal Tombs at Ur*, pub. 1969, 'Foreword').

**cp294»** In other words there is great variety of choice in translating cuneiform script. This adds to the uncertainty about the name of kings in king lists and for comparing Biblical names with cuneiform names. This causes confusion when we try to decipher ancient documents.

# Pul and Tiglath-Pileser

cp295» Pul is mentioned in the Bible as being a separate king from Tiglath-pileser (2 Kings 15:19-20, 29; 1 Chron 5:26, the "he" in this text refers to God not to Tiglath-Pileser or Pul; see CP5 in Text). Ptolemy's list of kings does have a "Pulu" reigning in Babylon after Ukin-zer. One Assyrian King list has "Pulu" reigning for two years in Babylon after Ukin-zer reigned three years while another list has Tiglath-Pileser reigning for two years in Babylon after Ukin-zer reigned for three years (Grayson, Assyrian and Babylonian Chronicles, p. 248). From this some say that Pul and Tiglath-Pileser are the same king. We think not. It would be very unusual if the word usage in the Bible concerning Pul and Tiglath-Pileser were speaking of the same king. They say this in order to force secular chronology onto Biblical chronology. There may have been a co-kingship of Pul and Tiglath-Pileser or some other explanation. The problem is that the Assyrian King list[s] are not detailed enough, there are gaps, the texts are broken, and the texts are copies of ancient records (Grayson, Assyrian Royal Inscriptions, 1972, Vol. 1, pp. 1 & XX-XXI). "The Assyrian royal scribes were prone to hyperbole, hypocrisy, and even falsehood. The modern historian must tread warily through this dangerous forest."

[Grayson, p. XXI, see pp. 29 paragraphs 172 & 173, p. 36 paragraph 222, p. 50 paragraph 323, and p. 83 footnote 178; and see Grayson's "Problematical Battles in Mesopotamian History" in Studies Landsberger pp. 337-342]

# Non-Accessional v. Accessional System of Counting

cp296» There is the non-accessional year method of counting regnal years where the first year is not counted from the first New Year's day, but from the year they became king (see above under "Israel's Non-Accessional Year System"). Thus, it is important to know if a kingdom used the accessional

year system or the non-accessional year system when trying to ascertain the count of years for kings of different kingdoms.

# "Began to Reign"

**cp297**» The phrase "began to reign" in about 284 cases in the King James Version and other English version of the Bible comes from the Hebrew word *malak*. This word means, "to reign, or to be king." This is Strong's number 4427, found in Strong's concordance.

cp298» From my personal study of the words "began to reign" in the Bible concerning the united kingdom and the divided kingdom, I found that the phrase indicated the king's *first* year of reign, whether the accessional year or non-accessional year method was used, if the king was counted as ruling for at least one year. But in the case of those kings who used the accession year method, but never ruled on a New Year's day (and therefore were not officially counted as ruling for a year or more), thus were counted as ruling only for months or days; they "began to reign" in the last official year of the king that preceded them. This was the case of Jehoahaz and Jehoiachin.

**cp299»** In the case of 2 Kings 25:27, the phrase "he began to reign" comes from the Hebrew word *malak*, but with the Hebrew suffix for "he" added. In this case *malak* becomes, *malekhow*. If you count Jehoiachin years of captivity inclusively, as we have in this edition, then Evil-Merodach let Jehoiachin go from his captivity in his first year.

# Mistakes in Other Chronologies

cp300» Because of the mistakes in the Greek translation of the original Hebrew text, because of misunderstanding of figures of speech in the Bible, because of the misunderstanding of the broad meaning of some Hebrew words, because of the lack of knowledge of the culture and laws of the Old Testament Jews, and because of the use of excuses such as "copyist error," there have been many mistakes in previous attempts at forming a correct Biblical chronology.

### Chaos

cp301» The Bible projects again and again astronomical chaos: hailstones and fire from the heavens; great earthquakes; the Sun, Moon, and Earth in chaos; mountains and valleys lifted up and down; the great Flood; the 360 day year versus today's year length, and so forth. The craterous face

of the moon, rocks from the Moon and Mars on the face of the earth, reversals of the earth's magnetic poles, and so forth also project great upheaval in the past (see later in CP2).

### Co-reigns

cp302» As in the case of the kings of Judah and Israel, sometimes more than one king reigned at the same time, co-regencies. Both Nabonidus and Belshazzar of Babylon ruled at the same time (see CP5). Both Darius the Mede and Cyrus the Persian reigned at the same time in the same kingdom. (See the book of Daniel and the Text of our chronology for more details.)

# **Dating Methods Differ**

cp303» Sometimes there was confusion as to when the start of a king's reign began: "Alexander was recognized in Egypt probably shortly after his invasion, late in 332. He was recognized in Babylon after Gaugamela in October, 331. Cuneiform evidence for the period of Alexander is confused, since two systems of dating were used. One system reckoned year 1 of Alexander as beginning April 3, 330; the other counted from his Macedonian accession, with year 1 as 336..." (Babylonian Chronology 626 B.C.-A.D. 75, by Parker and Dubberstein, p. 19).

**cp304»** Some nations start the reigns of their kings in the fall or spring or other times of the year (*Handbook of Biblical Chronology* [1964], by Jack Finegan, pp. 77-100). Some nations changed their system over the years (see CP1).

cp305» Some nations used the non-accessional year system for regnal years, others used the accessional year system. Some switched from one system to another (see CP1).

# **Artificially Longer Reigns**

**cp306**» Kings changed the length of their reigns in their chronicles in order to make themselves more important in history or in the case of non-contemporary chronicles to fill interregnum periods (p. 11 Parker and Dubberstein; pp 25ff Anstey).

### **Non-Contemporary Evidence**

cp307» Claudius Ptolemaeus (Ptolemy) wrote his Canon more than half a millennium after the time of the Babylonian empire. Berosus, a Chaldean priest at Babylon wrote a history of Babylon a quarter of a millennium after the Babylonian empire and only partial copies or translations or quotes of his work remain. The writings of Josephus which mention the Babylonian empire were written more than half a millennium after the Babylonian empire. The *Sedar Olam Rabbah*, containing the chronology of the world as reckoned by Jews was written after the destruction of Jerusalem and thus after the pertinent chronological documents were hidden away or destroyed by the Romans' attack on the city and temple. Some say the *Sedar Olam Rabbah* was written in the 2nd Century after Christ; there seems to be no real proof of its date. Many other works quoted by chronologists are made up of non-contemporary evidence (see Anstey's Chronology).

# Different Meaning of the Hebrew Ben

**cp308**» a male son," but "The name of son, like those of father and brother ... is of wide extent in Hebrew, and is variously applied. It is used — (1) Of a grandson ... also descendants ... (2). It is a name of age, for boy, youth .. (3). is applied to a subject, rendering obedience to a king or lord, as to a father, 2 Ki 16:7.. (4). a foster son, who is brought up like a son ... and a disciple .. (5). Followed by a gen. of place, it denotes a man there born, or brought up, 'sons of Zion,' ... (6). Followed by a gen. of time, it denotes a person or thing, either born or appearing in that time or as having existed during that time. Thus, 'son of his old age,' ... (7). Followed by a genitive denoting virtue, vice or condition of life; it denotes a man who has that virtue or vice, or who has been brought up in that condition ..." (Gesenius' Hebrew-Chaldee Lexicon of the Old Testament).

**cp309»** *Other Hebrew words* translated into such English words as *daughter* (# 1323), *sister* (# 269), *brother* (# 251), and *mother* (# 517) have also broad meaning in Hebrew. Some of the confusion in other Biblical chronologies exists because some have not understood the broad meaning of these and other Hebrew words.

# **CP4: Chronology and Christ**

Methods of Finding Christ's Birth and Death Dates
Dionysius Exiguus
Christian Era Dated From Christ's Death?
Birth and Death
Difficulty in Connecting Early Christian Era Dates
Three Days and Nights
Table of Correct Translation
Collation of Scriptures
Passover Scriptures

# Methods for Finding Christ's Birth, Baptism, and Death

cp310» We have connected our Biblical chronology to the Christian Era system through the information in the Bible on kings in the last stages of Judah and the Babylonian king Nebuchadnezzar, and because there is an astronomical cuneiform tablet that connects Nebuchadnezzar's 37th year with the Christian Era date 568-567 BC. (See CP3) This allows us to call the 37<sup>th</sup> year of Nebuchadnezzar (568-567 BC) an absolute date. Because this was the 37th year of Nebuchadnezzar, because of the scripture that connects the first official year of Nebuchadnezzar to the 4th year Jehoiakim (Jer 25:1), and because of other scriptures and cuneiform tablets that connect various events in Nebuchadnezzar's reign and events in Judah and the surrounding areas, we are assured of the connection between the Christian Era system (BC-AD dates) and the years of many events in the Old Testament to the BC-AD dates, it does *not* tell us exactly which Christian Era year Christ was born on or died on or how long Christ lived.

### **Christian Era**

**cp311»** To date from Christ's time onward most modern historians use the system of secular chronology that Dionysius helped to establish sometime in the sixth century AD. This is sometimes called the "Christian Era" system.

cp312» Even more sacred to some than Ptolemy's chronology is the Dionysius's chronological system, or the B.C. - A.D. system, or Christian Era system. "BC" or "B.C." means "before Christ." While "AD" or "A.D." means *Anno Domini* in Latin or "in the year of the Lord" in English. Almost all chronologists today use this system. There is a slight difference between the Christian Era system and the astronomical system (see CP2, "No Zero Year").

# Dionysius Exiguus

cp313» To help us understand the Christian Era system, we will look first at Dionysius and his system.

- Dionysius Exiguus (Dionysius the "Little") was a "Roman monk, chronologist, and scholar, a transmitter of Greek thought to the Middle Ages. He made collections of 5th century papal decrees and the canonical documents of the early church councils. Dionysius, in an attempt to improve the reckoning of the date of Easter, was the first (525) to use our present system of reckoning a date from the time of the birth of Christ" (p. 767, *The New Columbia Encyclopedia*, 4th Ed., 1975).
- "It was not until the year A.D. 532 that the Christian Era was invented by Dionysius Exiguus, a Scythian by birth, and a Roman Abbot. He flourished in the reign of Justinian (A.D. 527-565). He was unwilling to connect his cycles of dates with the era of the impious tyrant and persecutor Diocletian, which began with the year A.D. 284, but chose rather to date the times of the years from the incarnation of our Lord Jesus Christ 'to the end that the commencement of our hope might be better known to us and that the cause of man's restoration, namely, our redeemer's passion, might appear with clearer evidence.' The year following that in which Dionysius Exiguus wrote these words to Bishop Petronius was the year 248 of the Diocletian Era. Hence the new Era of the Incarnation as it was then reckoned was 284 + 248 = A.D. 532" (Martin Anstey, Chronology of the Old Testament, p. 33 [p. 19]).

Here it says Dionysius dated his system from "the birth of Christ" or "to date the times of the years from the incarnation of our Lord Jesus Christ." This is what is credited to him now. But why would he date his table

pertaining to Easter or the Passover from the *birth* of Christ? His tables pertain to Christ's death and resurrection, not his birth.

cp314» Dionysius' "new chronology was not regarded as a major discovery by its author; Dionysius' own letters are all dated by the indiction... The indiction was a cycle of 15 years originally based on the interval between imperial tax assessments but during the Middle ages always reckoned from the accession of Constantine, in 312" (*Encyclopedia Britannia*, 15th Ed., 1985, Vol. 20, p. 651, under heading, "History," and subheading, "Christian: The Christian Era"; see CP2 & 3).

cp315» This system credited to Dionysius (although in his own letters he does not use the system) is said to be called by some the "Era of the Incarnation." This Era of the Incarnation "was used in Italy in the sixth century, in France in the seventh century, and in England also in the seventh century, but not universally adopted in England until the ninth century.." (John J. Bond, *Handy Book of Rules and Tables for Verifying Dates with the Christian Era*, p. 212).

**cp316»** According to the *Greek Harmony of the Gospels*, "this era was first used in historical works by Venerable Bede early in the 8th century" (as quoted in *Unger's Bible Dictionary*, 3rd ed., p. 198).

Therefore Dionysius did *not* in the truest sense introduce the B.C. - A.D. dating system! The dating system began to be used later by others long after Dionysius' death.

### We cannot confirm these traditional dates

**cp317»** We cannot confirm these traditional dates given above or below for Constantine's accession or for when Dionysius' table was written or published because of the first three centuries of missing historical evidence and lack of sound astronomical evidence.

# What System did Dionysius Introduce?

cp318» What Dionysius introduced was a system or table to identify the Passover each year and from that to identify the Easter date each year; it was a system to determine the Paschal Cycle.

cp319» "The Orient and the West were divided on the question of the way to determine the date of Easter. The council of Nicaea had commanded the adoption of the Alexandrine rule, based on the 19-year cycle. At Rome, a tradition had been adopted that declared Easter should not be celebrated

before March 25 or after April 21, and the basis for calculation was the old 84-year cycle. Tables for the dates of Easter had been prepared in the Orient by Theophilus of Alexandria, and St. Cyril had continued his work. In the West tables were drawn up by Victorius of Aquitaine. They terminated with the year A.D. 531, and had as their respective points of departure the reign of Diocletian, for the Orient; and the Passion, for the West. In the *Liber de Paschate* (PL 67:483-508), Dionysius recommended the adoption of the Alexandrine cycle, as required by the Council of Nicaea, whose decisions were universally respected. He established a table of Paschal dates up to the year 626, which was a continuation of the table of Cyril of Alexandria..." (p. 877, "Dionysius Exiguus." *The New Catholic Encyclopedia*, 1967).

cp320» Notice that the various tables for the date of Easter and/or the Passover were dated either from the reign of Diocletian in the Orient or from the Passion in the West, that is, from Christ's death.

Easter dates, but he dated from the year *one* "to the end that the commencement of our hope might be better known to us and that the cause of man's restoration, namely, our Redeemer's *passion*, might appear with clearer evidence" (Anstey, p. 33). And "we have been unwilling to connect our cycle with the name of an impious persecutor, but have chosen rather to note the years from the *incarnation* of our Lord Jesus Christ" (Finegan [1964], sec 218).

**cp322»** Our Redeemer Jesus Christ's *passion* was his suffering and death on the day the Jews' killed their Passover lamb, the 14th of Nisan (John 19:14, 31, 42; Num 9:1-14; see CP4).

**cp323»** The table of the Paschal Cycle, or the Passover Cycle, or the Easter Cycle was written, according to Anstey, to make "better known to us ... our Redeemer's *passion*." But according to Finegan the cycle was connected by "years from the *incarnation* of our Lord Jesus Christ." Who was right?

# Vague Beginning of Dionysius' Cycle

**cp324»** Both Anstey and Finegan quoted an English version of Dionysius Exiguus's letter, "Epistolae Duae De Ratione Paschae," found in the Latin language today in J.P. Migne's *Patrologiae* (Latin series). In fact Anstey quoted what immediately followed after what Finegan quoted in Dionysius' letter. This important part of the letter reads in English:

"We have been unwilling to connect our cycle with the name of an impious persecutor [Diocletian], but have chosen rather to note the years from the incarnation of our Lord Jesus Christ to the end that the commencement of our hope might be better known to us and that the cause of man's restoration, namely, our Redeemer's passion, might appear with clearer evidence" (Migne, Vol. 67, 1865, p. 20, English translation of Latin text).

cp325» Here it apparently says that the Paschal Cycle was not connected to the impious persecutor Diocletian, but the years of the cycle were "from the incarnation of our Lord Jesus Christ." But why were some dating from the *death* of Christ?

# System Dated from the Death of Christ?

cp326» According to Bond, "the years of the Christian era are described in ancient writings as the years 'of grace;' 'of incarnation;' 'of our Lord;' 'of the nativity;' 'of the circumcision;' and 'of the Crucifixion.' "(Bond, p. 24, my emphasis)

cp327» Yes, there were those who believed that Dionysius dated his system from the *crucifixion* of Christ. After all, Dionysius' table was of the Passover cycle — Christ **died** on the Passover. And in the West they were counting from the "passion" of Christ.

### cp328» Notice the following:

- According to Bond, "there is no evidence of twenty-two years having been dropped by Dionysius, as imagined by Gervase of Canterbury, who, possibly supposed that the year of the 'incarnation' should date from the year of the Crucifixion ..." (Bond p. 217, my emphasis).
- "But perhaps Anastasius had chosen the year in which the Lord suffered ... to represent the *first year of the Christian era*, a system of reckoning sometimes observed ... We shall in that case find Golden Number XV indicating the 12th of March for the date of the New Moon, when the date of the Full Moon, or the 14th day of the month Nisan, commencing with 'New Moon,' would fall on the 25th of March" (Bond, p. 223, my emphasis).

(Note: Golden Number pertains to the Lunar cycle. The Lunar cycle is a cycle of 19 years. The Golden Number is a number 1 to 19 indicating the year of the cycle.)

**cp329»** As we already mentioned, the Christian era was also spoken of as being "of the Crucifixion" (Bond, p. 24). Thus, there were at least some who believed that Dionysius dated his Paschal Cycles from the death of Christ. After all didn't Dionysius say he used his system "to the end that the commencement of our hope might be better known to us and that the cause of man's restoration, namely, our Redeemer's *passion*, might appear with clearer evidence" (my emphasis).

### March 25th

**cp330»** Dionysius started his system not from December 25th or late Summer to the early Fall when Christ was **born**, but March 25th, the Julian date that some believe Christ probably **died** on.

cp331» "The system of reckoning the Christian era, now in use, was introduced by Dionysius Exiguus A.D. 533, commencing with the 25th of March, but subsequently reckoned from Christmas-day, in some countries, was reckoned from the 1st of January according to the year of the Julian era..." (Bond, p. 21).

cp332» "The system of commencing the year on the 25th of March was observed in various countries during several centuries; and in England, where it has been known as the English legal year, it was in use until 1751 A.D., after which date the year in England was reckoned from the 1st of January, according to the Julian form of year introduced 45 years before 1 *Anno Domini* of the Dionysian reckoning.

cp333» Particular attention should be given to the system of writing dates according to the English legal year, as it was called, mistakes having been made by confusing that form of year with the Julian year commencing on the 1st of January. There are not many historians who recognize the English legal system, and we are not aware that it has been noticed in any correct list of regnal years of the English Sovereigns, in modern works, before the first edition of this work was published...

cp334» The reign of James the First furnishes an illustration of the 'historical' confusion of dates, as that reign began on the 24th of March, 1602, according to the English system, the next day being called the 25th of March, 1603. While in Scotland, the date of the Accession of James to the English throne was 1603, the Julian form of year having been ordered to be

used in Scotland in the year 1600, by proclamation, dated the 17th of December, 1599" (Bond pp. xvi & xvii).

**cp335»** "It was not until 1752 A.D. that the year in England commenced on the 1st of January, and the 29th of February was written so as to accord entirely with the form of the Julian year" (Bond, p. xx).

cp336» Today many interpret that Dionysius started his system on March 25th because at that time the 25th of March was felt to be the annunciation to Mary (see Finegan [1964], ¶219). But Dionysius did not start his system from the conception of Christ, it was a system, a table of Passovers, beginning with the first Passover so as to show "with clearer evidence" the "passion" of Jesus Christ.

**cp337»** Dionysius system from the beginning started from March 25th. Over a period of time it was changed to various times until finally today it mostly begins on January 1st of each year. But from the beginning it was March 25th:

- Anastasius, a Bishop of Antioch, states, that our Lord suffered, in his 33rd year, on the 14th day of the moon, the 29th of Phamenoth (see Bond p. 222f). The month "Phamenoth" is from the Egyptian Civil Calendar (Finegan [1964], ¶ 49 & Table 8). This month had 30 days corresponding to the Julian year dates of Feb 25th (or 26th for intercalary years) for the 1st of Phamenoth to March 26th for the 30th of Phamenoth. Even in intercalary years the 29th of Phamenoth was always March 25th. **Therefore the 29th of Phamenoth was March 25th**.
  - The 25th of March was when Jesus Christ suffered or was "crucified" (Bond p. 222, quoted by Anastasius from a fragment of the *Apostolic Constitutions*).
  - The 25th of March was when the system of Dionysius began (Bond, p. 21).
  - England began its year from the 25th of March "after the sixth century, until 1066. 1 January to 31 December, 1067 to 1155. 25 March to 24 March, 1155 to 1750-1" (Bond, p. 91).
  - In Scotland the year was reckoned from March 25th to March 24th until 1599 (Bond, p. 92).
  - In France the year was from March 25th to March 24th until 1564. Many other countries also dated their year from March 25th to March 24 (see Bond, p. 91 to 101).

# **Paschal Cycle**

cp338» The Dionysius system is also called the Paschal Cycle: "The cycle is composed of 532 years, on the completion of which, the Easter-days recur in the same order as before, if the cycle of Golden Numbers be not changed. The solar cycle 28, and the Lunar cycle 19, multiplied together make the cycle of 532 years" (Bond p. 125).

**cp339»** "A.D. 532 *Dionysius Exiguus* commenced his cycle of 19 years [the lunar cycle] with Golden Number I. ... And further, — Dionysius by making Golden Number I of his cycle of 19 years fall to 532, made Number II fall to 1 A.D" (Bond, p xli, & see p. 223).

cp340» Thus, the year just before A.D. 1 had the same Golden Number as A.D. 532, which is I (Bond, p. 127). *If* Dionysius dated from the passion, then A.D. 1 was the first anniversary of the passion, the year 532 being the 532nd anniversary, and the year 1987 being the 1,987th anniversary of Christ's passion, thus "to the end that the commencement of our hope might be better known to us and that the cause of man's restoration, namely, our Redeemer's passion, might appear with clearer evidence" (Dionysius, as translated from Migne's *Patrologiae*).

cp341» "And further, — Dionysius by making Golden Number I of his cycle of 19 years fall to 532, made Number II fall to 1 A.D. of his reckoning, as well as to 533 with the year-Letter B, and thus the 27th of March was the date of Easter-day for 533 A.D. while the 25th of March, the date of 'the annunciation' was commemorated for Good Friday; hence we have the supposititious statement of some writers, that our Lord suffered on the 25th of March' (Bond, p. xli).

cp342» We disagree that the Lord suffered on a Friday (See CP4). But we quote here from Bond so you can see some of the thinking of those trying to ascertain the date of Christ's "annunciation" and or "passion," and to show you again the mixing together of Christ's conception and his death in the thinking of some.

# What was Meant by "Incarnation"?

cp343» But what about Dionysius' statement that he chose to "note the years from the *incarnation* of our Lord Jesus Christ." We take for granted that the Dionysius' work we quote from was not changed and that the word "incarnation" was not added at a later date.

cp344» "Incarnation" comes from a Latin word that means, the act of being *made flesh*. The idea of incarnation came from John 1:14, "And the Word was made flesh." In the truest sense of this scripture the Word was made flesh after the resurrection when Christ went to his Father (GP5). But there is creditable secular evidence that at the time of Dionysius, "incarnation" meant to some, if not most, the conception of Christ in the Virgin Mary through the power of the Holy Spirit:

cp345» "It was not that an ordinary man was first born of the holy Virgin, and that afterwards the Word descended upon him. He was united with the flesh in the womb itself, and thus is said to have undergone a birth after the flesh, inasmuch as he made his own the birth of his own flesh."

("Dogmatic Letter" or "Second letter to Nestorius," by Cyril, Bishop of Alexandria, 412-444; Feb. 430 was "read and approved at Ephesus and later at Chalcedon." *Documents of the Christian Church*, 2nd Ed., H. Bettenson, Editor, Oxford)

Even here conception ("flesh in the womb") and birth were intermixed, at least in the English translation.

**cp346**» In another document found in, *Documents of the Christian Church*, Leo, Bishop of Rome, A.D. 440-461, writes of the "incarnation of the Word of God," but is not clear as to what he meant by the incarnation. Leo writes of the Son being "**born** of the Holy Ghost and the Virgin Mary. But this birth...." And "since he was conceived of the Holy Spirit, in the womb of his Virgin Mother ... That birth...."

cp347» If Dionysius meant by "incarnation," the birth of Christ, than why did he begin it from March 25th, nine months before December 25th — the date traditionally said to be Christ's birth.

cp348» If Dionysius meant by "incarnation," the conception of Christ (Finegan [1964], sec. 219), then why didn't he so state it. Of course, if Dionysius meant by "incarnation," the conception of Christ, then March 25th would be close, if Christ was born on December 25th. "As to whether our Lord's birth really occurred on December 25 ancient authorities are not agreed. Clement of Alexandria says that some place it on April 20, others on May 20, while Epiphanius states that in Egypt Jesus was believed to have been born on January 6" (*Unger's Bible Dict.*, under "Christmas"). But the birth date of Christ is not as important as His teachings and His death. This is one reason the Bible does not give the exact date of Christ's birth. In Dionysius' time, December 25th was the conventional date of Christ's birth in the West, but January 6th was the date in the East (Finegan [1964], ¶ 408, see ¶ 393-408).

# March 25th: Incarnation & Passion Date

According to Augustine (c.354-430 A.D.), Bishop of Hippo:

"For He [Christ] is believed to have been conceived on the twenty-fifth of March, upon which day also he suffered ....
But he was born, according to tradition, upon December the twenty-fifth." [Finegan [1964], ¶ 407; On the Trinity, Book IV, Chap 5 found in the Christian Classics Ethereal Library on the Wheaton College web page.]

### To Review

cp349» Here may be the answer. On the 25th of March Christ was felt to have been conceived ("incarnated") and also it was believed to be the date he died ("passion"). Thus Dionysius' March 25th date has something to do with both the conception and the death. Since Dionysius' Passover table had to do with his death, it had to be dated from his death, not his birth or conception. But from the table you can count back to Christ's conception or "incarnation."

cp350» Looking at all the available evidence, including Biblical evidence, we come to a conclusion. Just because today we think Dionysius dated from Jesus Christ's birth or conception does not make it so. Others dated from Jesus Christ's death. Dionysius' paper is a table of passovers and it is much more logical for it to be dating from Christ's passion "the end that the commencement of our hope might be better known to us and that the cause of man's restoration, namely, our Redeemer's passion, might appear with clearer evidence" (Migne, Vol. 67, 1865, p. 20, English translation of Latin text).

### When was Christ Born?

cp351» "But the modern chronologist is confronted with no inconsiderable difficulty at the very outset to fix the *exact date* of the nativity of Jesus Christ ... This is due to the fact that he is compelled to base his computation on dateless documents written in a remote antiquity. For neither sacred nor profane authors in those times were at all accustomed to record historical facts under distinct dates. All demands were satisfied when known occurrences were referred to definite periods, as within a certain generation, or under a specific dynasty, or within the reign of a given

ruler already familiar to the contemporaries addressed" (*Unger's Bible Dict.*, p. 197, col. 2).

#### A.U.C. Date

cp352» Dionysius developed a table of passovers. Why would he start the table from Christ's birth? This makes no sense, but it does make sense to date from Christ's death. Modern writers state that Dionysius connected the start of his table with the year 754 A.U.C. [A.U.C. stands for anno urbis conditae or "in the year of the founded city." The founded city being Rome.] They then state that he made a mistake and that the year was really 750 A.U.C (Bond, pp. x-xi; Unger, Dict. p. 198; etc.). Thus, today many believe that Dionysius made an error in dating Christ's birth of from 4 to 7 years (p. 877, The New Catholic Encyclopedia). "The common consensus of eminent biblicists is that he [Dionysius] erred in his conclusion by at least four years" (Unger's Bible Dict. p. 198, col. 1). But nowhere in Dionysius' document does he even mention A.U.C. or any thing to do with any date about the foundation of the city of Rome.

### **Diverse Dating Methods and Assumptions**

cp353» Dionysius' letter in which he set forth his system, was called "Epistolae Duae De Ratione Paschae." A copy is found in Patrologiae, LXVII, 19 ff. It was *not* dated by the A.U.C. system, or the Era of Olympiads, or the Era of Seleucid. It was *not* dated according to the rule of some king. It only indirectly dated through the BC-AD system. He is said to have dated his letters by the indiction (Ency. Brit., 15th Ed., Vol 20, p. 681, 15th Ed., 1985). Copies of papyri letters in such books as C.K. Barrett's *The New* Testament Background are dated by the year of the reign of kings, not the so-called era of Augustus. Furthermore, it was only in about the last 200 years that most nations started dating with BC-AD system. Their old methods and dates may have been wrong, thus when they converted their history to BC-AD dates mistakes may have been made. Dionysius, himself, did not use the BC-AD system. Others after Dionysius started to date by the AD system, but not commonly until the 18th century. And it was only in the 18th century that writers started to date events happening before Christ by using "B.C" (before Christ) in connection with the date (Finegan [1964], ¶ 220).

cp354» Many writers assume that Dionysius dated Christ's birth from 1 AD with this being the first year of Christ. This is only an assumption since nowhere does Dionysius state clearly the date of Christ's birth or conception. Dionysius, himself, did not use or invent the BC-AC

terminology. His table was a Passover table. His cycle is a cycle of 532 years. The cycle is made up of the 28 year solar cycle and the 19 year lunar cycle. 28 times 19 is 532 years. Each year of Dionysius' 532 year cycle is numbered from 1 to 19. When the year number reaches 19, the next number is 1. These numbers indicate the year of the 19 year lunar cycle. His cycle supposedly began on March 25th, 532 AD. If this date is correct, the evidence does not point to 1 AD, but to 1 BC. This is so since the first year of his lunar-solar cycle of 19 years can be retro-calculated to 1 BC, because it began in 532 BC, which is one cycle of 532 years since 1 BC (Bond, p. 127 ff; *PL*, LXVII, p. 493 ff).

cp355» But what does this mean? Little, since we don't know, for sure, if Dionysius was dating his Passover cycle from Christ's death (on a Passover) or from his conception as some allege, and we don't know if the 532 AD date is correct since it is based on other assumptions.

#### To Review

cp356» By reviewing the beginning of the Christian Era system we again manifest the difficulty of chronology. What Dionysius *apparently* did was to connect his Passover Table to March 25th 1 BC (see above). In some manner he also connected his table to the Passion or death of Christ, which he supposed was also March 25th. Dionysius' Passover Table was a continuation of two other tables before his. One of them in the West dated from the Passion. But there are other problems with some of the assumptions and lack of clear evidence for some dates.

### **Christ's Birth**

### Dionysius' Date

cp357» As we just saw, Dionysius Exiguus is the one who is credited with inventing the Christian Era system. Dionysius' system was a continuation of two older systems that supposedly went back to 297 AD and 284 AD and even to the Passion (Bickerman, pp. 78-79, 72-73, 81; see CP2). We just learned that the date that Dionysius started his system was March 25th. March 25th was the date he assumed Christ was conceived on and/or died on. Most today, through various methods, date Christ's birth from about 7 BC to 1 AD. Jack Finegan in his *Handbook of Biblical Chronology* [1964] gives a review of pertinent information on this subject (pp. 215-258). But because of various passages in the Bible and other evidence we believe Dionysius' table is more likely dated from Christ's death, yet we are unsure of the exact date.

**cp358»** According to Finegan, most dates from early Christian sources give dates for Christ's birth that *translate* from 4/3 BC to 1 AD (Finegan [1964], Table 107; etc.). The following gives a date between 3 to 2 BC:

- Tertullian, An Answer to the Jews (c. 198 AD)
- Julius Africanus, *Chronographies* (c. 170-240 AD)
- Hippolytus of Rome, *Chronicle*, (c. 170-236 AD)
- Origen, *Homilies on Luke*, (c. 185-253 AD)
- Eusebius of Caesarea *Church History*, (c. 325 AD)
- Epiphanius, *Panarion*, (c. 315-403 AD)

But this was based on indirect evidence pertaining to the interpretation of the relationship of A.U.C. to the BC-AD dates. I disagree with contemporary dates concerning Christ (See, "Chronology Confusion" below). Dionysius was probably dating from Christ's passion and not his birth. By my interpretation, the seven sevens of Daniel and other information in Ezra, Nehemiah, and Genesis make more sense. With contemporary interpretation, one must stretch unreasonably the ages of people mentioned in the books of Ezra and Nehemiah, making some over 120 years old (See cp381ff).

# **Eclipse: Days of Herod**

**cp359»** Matthew 2:1 says that Jesus was born "in the days of Herod the King." There are different ways of dating Herod's reign (Finegan [1964], ¶ 432). Herod died sometime after Christ's birth maybe as much as two years (Matt Chap 2).

cp360» Josephus in his Antiquities of the Jews mentions an eclipse of the moon before Herod's death (Bk. 17, Chap. 6, ¶ 4). This is the only eclipse mentioned by Josephus in his known works. According to Josephus, this eclipse happened on the very night that the leader of a sedition against Herod was burnt alive (Josephus, Antiquities of the Jews, book 17, chap. 6, ¶ 4; see Josephus, War of the Jews, book 1, chap. 33, ¶ 2-4). It did not happen on the eve of the Passover as Unger wrongly indicates (Unger's Bible Dict. [1966], pp.198-199). Finegan says in his work (Handbook of Biblical Chronology [1964], ¶ 365) that it was "shortly" afterward that the feast of the Passover occurred. But at least 10 or more events happened after the eclipse, which occurred the "very night" Herod "burnt the other Matthias, who had raised the sedition, with his companions, alive" (Antiquities of the Jews, book 17, Chap 6, paragraph 4). The 10 or

more events after this eclipse of the moon had to have taken months not days.

- 1. "After this [burnt alive Matthias and others at the time of the eclipse of the moon], the distemper seized upon his whole body....Yet did he struggle with his numerous disorders, and still had a desire to live, and hoped for recovery....Accordingly, he went over Jordan, and made use of those hot baths at Callirrhoe, which ran into the lake Asphaltitis....And here the physicians thought proper to bathe his whole body in warm oil...He then returned back and came to Jericho."
- 2. "He proceeded to attempt a horrid wickedness; for he got together the most illustrious men of the whole Jewish nation, out of every village, into a place called the Hippodrome, and there shut them in. He then called for his sister Salome, and her husband Alexas, and made this speech to them: 'I know well enough that the Jews will keep a festival upon my death ['funeral feast,' see *Wars of the Jews*, book 2, chap. 1, paragraph 1]; however, it is in my power to be mourned for on other accounts, and to have a splendid funeral, if you will but be subservient to my commands. Do you but take care to send soldiers to encompass these men that are now in custody, and slay them immediately upon my death, and then all Judea, and every family of them, will weep at it, whether they will nor no."
- 3. letters came from Rome concerning Antipater
- 4. Herod "for a little while revived, and had a desire to live"
- 5. Herod tries to kill himself
- 6. Antipater tries to escape from prison; Herod kills Antipater
- 7. "So Herod, having survived the slaughter of his son **five days**, died, having reigned thirty-four years since he had caused Antigonus to be slain, and obtained his kingdom; but thirty-seven years since he had been made king by the Romans."
- 8. Herod was mourned seven days.
- 9. A funeral feast was given to the multitude.
- 10. Archelaus after this feasted with his friends.
- 11. The multitude began to upraise against the new leader. "They lamented Matthias, and those that were slain with him by Herod...The people made a great clamor and lamentation hereupon, and cast out some reproaches against the king also...."
- 12. "Now, upon the approach of that feast of unleavened bread, which the law of their fathers had appointed for the Jews at this time, which feast is called the **Passover...**"

cp361» This eclipse was *not* any of the four near the traditional date of Jesus Christ's birth (March 25, 5 BC; March 13, 4 BC; Jan 10, 1 BC; Dec 29, 1 BC). But if Dionysius dated his Passover tablet from the death of Christ, then the total eclipse on November 18, 27 BC (-26) may be the eclipse reported by Josephus. This total eclipse was one of the longest in duration in history.

**cp362»** Before Herod died he killed the youths of Bethlehem and the surrounding area from two years and under in accordance to the time the wise men's star appeared (Mat 2:16). Herod died sometime after Christ was a "young child." Therefore Christ *may* have been up to two years old just before the eclipse.

cp363» The Bible does not mention an eclipse, so there is no Biblical evidence one way or another concerning an eclipse near Christ's birth. Because of what we learn about the "identification game" in CP2, we cannot identify any event in the past by only one eclipse: *thus this eclipse is not definitive*. Although, an eclipse along with other evidence could help in identifying Christ birth, death, and resurrection.

# Rule of Caesar Augustus

Augustus. There are various ways to date the reign of Augustus. Finegan in his *Handbook of Biblical Chronology* [1964] shows 5 different ways of counting Augustus' reign (Finegan [1964] Table 96). Depending on which method is used the date for Christ's birth varies. (Finegan [1964], pp. 215 ff) One way of dating Augustus' reign is to assume that Eusebius of Caesarea (c. 325 AD) is correct in dating Christ's birth in the "twenty-eighth year after the submission of Egypt and the death of Antony and Cleopatra" (Finegan, p. 226; see Table 96, col. 3, 4, 5). But the Bible does not mention the regnal year of Augustus in connection with the birth of Christ. In the data alone **concerning Augustus's connection to Christ's birth there is no absolute evidence for the BC-AD date of his birth**. If the date for Augustus is wrong, then also will be the date given for Christ's time. As we are seeing in this paper, the contemporary dates for Christ's time may be off by 30 years.

# Governor Cyrenius/Quirinius

cp365» Luke 2:1-5 speaks of the enrollment for taxation when Cyrenius or Quirinius was governor of Syria. This was at the time Mary the mother of Christ was pregnant. She gave birth during this time (v. 6-7). "Tertullian says in fact that the census at the time of the birth of Jesus was 'taken in Judea by Sentius Saturninus.' A study of the possible year(s) when Quirinius was governor of Syria shows there is no absolute way of dating his governorship, thus there is no absolute evidence of the BC-AD date for Christ's birth through the Quirinius connection.

### **Fall Birth Date**

cp366» The part of the year Christ may have been born in was the Fall. It is traditional for many to say that Christ was born on Dec 25 or Jan 6. Because of evidence that indicate that Christ's ministry lasted three and one-half years after he was about 30 years old (see below), and because Christ died in the Spring on the Passover, then Christ was born in the Fall.

# Star

cp367» In Matthew 2:1-2 it mentions a "star" in connection with Christ's birth. But since we do not know for sure what was meant by this star (planet, star, group of stars, new star, comet, conjunction, etc.), the reference in the Bible does not really help us identify Christ's birth in relation to BC-AD dates.

# **Baptism & Death**

**cp368**» The date of Christ's baptism and the length of Christ's life may be ascertained through scripture and through secular evidence, if any reliable secular evidence can be found.

### Tiberius' 15th Year

cp369» In Luke 3:1-3 it connects the beginning of the preaching of John the Baptist in the 15th year of "Tiberius Caesar, Pontius Pilate being governor of Judea, and Herod being tetrarch of Galilee, and his brother Philip tetrarch of Ituraea and of the region of Trachonitis, and Lysanias the tetrarch of Abilene, Annas and Caiaphas being the high priests."

cp370» There are at least 4 different ways of counting Tiberius Caesar's reign. (See Finegan [1964], Table 115, and paragraph 409) It should be noted that Luke 3:1-3 is speaking about *when* John the Baptist began to teach. Through scripture it can be shown that John began his ministry 6 months before Christ started his own ministry, and six months before his water baptism (Luke 1:11-33; cf. Num 4:2, 3; Luke 3:23).

cp371» There is also dubiousness about the time of the year that Tiberius started his count of years, and dubiousness about the method Luke used to count Tiberius's years. *This again gives no absolute way of dating Christ's life in BC-AD dates.* Again, if the contemporary dates are wrong for Tiberius, then also it will be wrong for Christ, as many as 30 or more years off the true date.

### 30 Years Old

**cp372»** From Luke 3:23 we see that Christ began to be about 30 in the 15<sup>th</sup> [16th] year of Tiberius. But in this time he was baptized by John who was teaching in the wilderness (Luke 3:1-23). This time was also the 15th (or 16th year depending on method of counting regnal years and remembering that Christ was baptized six months after John first went into the wilderness to teach) of Tiberius Caesar. In this time period Christ also started his teaching (Luke 3:23; 4:1-16).

# 46 Years of the Temple

cp373» In John 2:20, at the time of one of Christ's passovers during his 3 ½ years of teaching (John 2:13), some Jews said that the Temple in Jerusalem was in its 46th year of building, or it was 46 years after it was rebuilt. Josephus states in his Wars of the Jews that in the "fifteenth year of his reign, Herod rebuilt the temple" (Book 1, Chap XXI, ¶ 1). But in Josephus' Antiquities of the Jews he says, "Herod, in the eighteenth year of his reign, and after the acts already mentioned, undertook a very great work, that is, to build of himself the temple of God" (Book 15, Chap XI, ¶ 1). And Josephus said in his Wars of the Jews, "So, Herod, having survived the slaughter of his son five days, died, having reigned thirty-four years since he had caused Antigonus to be slain, and obtained his kingdom; but thirty-seven years since he had been made king by the Romans" (Book 1, Chap XXIII, ¶ 8). According to Finegan "there is a difference of three years between the two possible beginning points for the reign of Herod ... when he was named king, and ... when he actually took Jerusalem" (¶ 432). Finegan's dates for Herod are in his Table 108.

So in his  $15^{th}/18$ th year, Herod after he took Jerusalem, began to rebuild or restore the temple. At the time of John 2:20, the temple had been in its  $46^{th}$  year of restoration.

# Olympiads & Seleucid Years

cp374» By comparing Josephus Ant. Book 14 Chap XIV, ¶ 8 with Book 16, Chap V, ¶ 1, we see that Herod received his reign in the 184th Olympiad, year 4, his first year being the 185th Olympiad and his 28th year the 191st Olympiad, 4th year. If Josephus counted the Era of the Olympiads correctly, and if we could correctly place Josephus' count of the Olympiads in the Christian Era system we would have the correct years of Herod the Great. But as Bond indicates in his *Handy Book* ..., "the old era of Olympiads appears only to have been used by writers, and especially by historians. It does not seem to have been ever adopted by any state in public documents. It is never found on any coins, and scarcely ever on inscriptions" (p. 192, Bond). There is no hard connection between the Era of Olympiads and the Christian Era system. In Josephus' work there is a connection between the Era of Olympiads and the Era of Seleucid (Ant. Book 12, V, ¶ 4; book 12, VII, ¶ 6). But as we will see in CP2, there are two starting points to the Era of Seleucid, one in Egypt and one elsewhere. 1 AD is only "said to coincide with Ol. 195.1" (p. 193, Bond) if Dionysius dated his table

from Christ's birth. But our chronology and our studies conclude that Dionysius' table was probably dated from Christ's death and thus would approximately make 31 BC approximately coincide with Ol. 195.1. It makes no sense for Dionysius to have dated his Passover table from Christ's birth. Christ died on the Passover, the table concerns the Paschal cycle, thus Dionysius must have been dating from Christ's death, which was a Passover.

# Length of Life

cp375» Irrespective of this confusion, as stated above, we see that Christ began to be about 30 years old when he began to teach. He died according to scripture after his few 3 ½ years of ministry. We ascertain the length of his ministry by how many Passovers he taught on. Finegan [1964] gives a somewhat detailed explanation on how to ascertain the length (¶ 436-443 [596-603]). What it comes down to are the 3 Passovers mentioned (2:13; 6:4; 11:55) in the book of John and the one implied in John 5:1, or between 4:35 and 5:1. Also depending on how you interpret Dan 9:27 and the weeks of years, this scripture indicates a 7 year period with Christ being cut off in the middle of the 7 years: 3 ½ years (See William E. Biederwolf, *The Second Coming Bible*, p. 224).

### To Review

cp376» What connects Christ to Roman history is that he was born in the rule of Augustus, at the time of the taxation by Quirinius, in the last days of Herod the Great, just before an eclipse (up to two years before). He was 30 years old in the 15th/16th year of Tiberius (see above). He died on the 14th of Nisan on a Wednesday three and one-half years after he turned 30 years old. But scripture does not give which regnal year of Augustus Christ was born on, yet others state in the 28th year. Because of the confusion for the beginning of certain key Roman rulers, because of the uncertainty of the way these rulers' years were counted (by local methods, by Roman methods, accession year or non-accession year method, etc.), there is a 3 to 4 year uncertainty concerning the years of certain key rulers of the Roman Empire. But much more importantly, since Dionysius' 1 BC or 1 AD starting date for his passover table, may be the date that Dionysius thought was Jesus Christ's death and not his birth, then traditional dates are 30 or more years off.

## Difficulty of Connecting the Christian Era With Other Systems

cp377» Connection Between Christ's Time and Other Systems. There are methods to translate the years of Roman leaders into the Christian Era dates (Bickerman, Chronology of the Ancient World, 1968, pp. 80 ff; Finegan, pp 215 ff). But we must be careful here:

"A casual glance at the texts of Livy or Diodorus Siculus will suggest the validity of Bickerman's conclusion that the Romans dated by consuls ... The system like the Athenian archon list, was cumbersome and inefficient. Although the Romans could have tied their chronography to Olympiads or to an early event like the fall of Troy ... they chose to try to create a system with an epoch that of the founding date of Rome.... A number of such systems were devised, but as Roman scholarship never reached a consensus in the founding date, each of the systems was at variance with the others..." (Alan E. Samuel, *Greek and Roman Chronology* [1972], pp. 249-50).

**Ptolemy:** The king list of Ptolemy which is used by some for chronology purposes is just that a list of kings with what Ptolemy thought was the length of their reigns. His testimony cannot be compared with continuous records of contemporary witnesses because there are gaps in records and other problems (Also see CP2).

Censorinus: Censorinus was a Latin writer who according to contemporary dates wrote or published a work called *De die Natali* in the year A.D. 238. He fixed the date of the last Sothic period before his own time. This "fix" is used by Egyptologers in translating the Egyptian Vague year of 365 days into the Julian year of 365 1/4 days. Also he helped to set contemporary dates for the first Olympiad by placing the 1014<sup>th</sup> year since the first Olympic before the consulship of Ulpius and Pontianus. This makes the first Olympiad occurring in about B.C. 776. Censorinus admits that "there was also some disagreement among different writers, though it is confined within a period of only six or seven years" (*Cory's Ancient Fragments*). But the date 776 BC depends on how Dionysius dated his table. If he dated from Christ's death and not his birth, then all contemporary dates are off about 30 years. And, remember Dionysius wrote his table 500 years after the fact, leaving him centuries away from the best evidence.

### **Eusebius' Influence**

**cp378**» Eusebius, who is a father of Ecclesiastical history, relied on others for his chronology:

"It was Eusebius who first adopted the hypothetical Era of the Greek Olympiads, and assuming its truth, equated the years there given to the annals of the Old Testament.... The importance of Eusebius lies in the fact that the example which he set, and the figures which he gave, have been followed ever since" (Anstey, Chron. Old Testament, p. 45 [25]).

Eusebius assumed something to be true and ever since chronologies have copied his numbers as fact.

### **Christ's Time Identified Through His Death**

cp379» Now we will turn to the *death* of Christ and the prophecy as to when He would appear in time. It is his death on a Passover which may help us to identify his year of death and thus his birth and the years of His ministry. Later in CP4 we show that Christ, was killed at the end of a Wednesday near or at sunset on a Jewish Passover, the 14th of Nisan when the lamb was killed. We look for a Jewish Passover, 14th of Nisan, that occurs on a Wednesday to find out which year Christ died on. This Passover should be about 2000 years prior to the end of the age in order for the antitype of the three days and three nights to come true. I will not explain this in detail here, but remember the antitypical day is equal to 1000 years, and remember the duality of Daniel 9:26-27.

cp380» Today most believe that Christ died between 27 and 34 AD (Finegan ¶ 455, p. 292), with most thinking his death was between 30 and 33 AD. But we should look earlier for the date of Christ's death because of what we have so far documented plus the following important evidence:

### **Absurd Ages of Biblical Characters**

If contemporary dates are correct, then the ages of Ezra, Nehemiah, and the priests are absurd

cp381»

■ Ezra. If contemporary chronology is correct, then Ezra would have been at least 128 years old when he came from Babylon in the 7th year of Artaxerxes to be present at the dedication of the Temple (Ezra 7:1, 8). Contemporary chronology has the Artaxerxes of Ezra being identified with Ptolomy's Artaxerxes Longimanus (BC 464-424). "Seraiah, the father of Jehozadak and Ezra, was slain by Nebuchadnezzar at Riblah in his 19th year, B.C. 586 (2 Kings 25:8, 18-21). Therefore Ezra must have been born about or before B.C. 586. But the 7th year of Artaxerxes Longimanus was B.C. 458. Therefore, if the Artaxerxes of Ezra 7 was Artaxerxes Longimanus, Ezra must have been at least 128 years old when he came to Jerusalem in the 7th year of Artaxerxes Longimanus, and at least 141 when he walked in procession at the dedication of the wall with Nehemiah, in the 20th year

- of Artaxerxes Longimanus, which is absurd" (Anstey, p. 136 [270-271]).
- Nehemiah. According to contemporary chronology, "Nehemiah returned with Zerubbabel (B.C. 536), Ezra 2:2, Neh 7:7. His name stands first on the list after Zerubbabel and Joshua. But the 32nd year of Artaxerxes Longimanus was B.C. 433. Therefore, if the Artaxerxes of Nehemiah was Artaxerxes Longimanus, Nehemiah must have been 103 years older when he returned to Babylon in the 32nd year of Artaxerxes Longimanus, then he was when he came to Jerusalem in the 1st year of Cyrus as one of the leaders of the people" (Anstey, p. 136 [271]).
- Priests. "Twenty out of the thirty priests and Levites who returned with Zerubbabel in the 1st year of Cyrus, B.C. 536 (Neh 12:1-9), signed the covenant with Nehemiah (Neh 10:2-10) in the 20th year of the Artaxerxes of Nehemiah. But [according to contemporary chronology] the 20th year of Artaxerxes Longimanus was B.C. 445. Therefore, if the Artaxerxes of Nehemiah was Artaxerxes Longimanus, then twenty out of these thirty men were still alive 91 years after they came to Jerusalem, although they were all heads of their families then, which is absurd" (Anstey, p. 136 [271]).
- *The lack of evidence of later Persian kings*. See "77 Years of Missing Evidence" and "Ptolemaic Canon" in CP2.
- The lack of evidence of natural phenomena (eclipses) that help to pin point dates in the first three centuries of the Christian era. "The first three centuries of the Christian era, when the Roman Empire was at its height, are a Dark Age as far as natural phenomena are concerned.... Comet chronology until AD 600 depends mainly on the reliable Chinese records, and the Graeco-Roman dates in the standard catalogues (e.g. Barnett 1978) often need adjustment accordingly. Western dates were sometimes deliberately falsified even in later centuries. Eclipse records of the first century are so few that elaborate attempts to adjust the usual chronology could still be discussed in the nineteenth century.... Our knowledge of the eclipses of the period — as indeed of the emperors themselves — would be different if the eyewitness sources — such as the Universal Chronicle of Cornelius Bocchus or the Roman History of Velleius (c. AD

- 29) were ever found e.g. at Herculaneum" (p. 1, *Chronology of Eclipses and Comets AD 1* 1000, by D. Justin Schove, 1984, The Boydell Press).
- **Coin Evidence** "The ancient sources of information for certain periods of Roman Imperial history, notably the Third Century, are very poor, and the evidence of the coins is of considerable value in a number of cases. For example, it is quite obvious, form the number of coins which he produced, that the Gallic usurper Marius reigned for a great deal longer than the two or three days with which he is credited by the author of the *Historia Augusta*.... Happily, other periods are much better documented, and I have in the main followed such learned works as the Cambridge Ancient History and the Cambridge Medieval History (The Emperors of Rome and Byzantium: Chronological and Genealogical Tables for History Students and Coin Collectors, David R. Sear, page 6). Notice he could not use coins to date, but he had to use sources that mostly relied on the Ptolemaic Canon, which is dubious and probably fraudulent.

### Summary

### Christ died on April 16, 10 AD?

cp382» Although we have found no absolute clear evidence for the date of Christ's birth and death, yet we can be reasonably sure because of the Biblical evidence in cp381 and other evidence that Christ's birth and death happened about 20-30 years previous to contemporary dates. If Christ's birth took place at this time in the Fall of 27, 26, or 25BC. [An Eclipse of 1.8] magnitude occurred on November 18, 27 BC and its total duration was one of the longest in history- 50 minutes.], then Jesus may have died 10 AD on a Wednesday, the 14th of Nisan, or April 16, 10 AD (JDN 1724816), depending on several factors mentioned above. He died in His 33rd year, as Judah counted her kings' years, in the last year of the 4th millennium: thus fulfilling the antitype for the fourth physical day of creation (Genesis 1:14-19) when the sun, moon, and stars were created. Christ is symbolized by the Sun and Moon (see gp519ff). This possible date is very different from contemporary guesses. The possible mistake may have come from a misunderstanding concerning when Dionysius Exiguus began his table of passovers. His table was from the *death* of Christ and not the birth of Christ. Lost records from the dark centuries after Christ's time and the fraudulent Ptolemaic Canon made this mistake possible. There are **no** confirming eclipses that date the

contemporary dates of the Roman leaders. See parts 2, 3 and 4 of the Chronology Papers for more details

### **Three Days and Three Nights**

cp383» Jesus Christ said the only sign he would give, "an evil and adulterous generation seeks after a sign; and there shall be no sign given to it, but the sign of the prophet Jonah: For as Jonah was three days and three nights in the whale's belly; so shall the Son of man be *three days and three nights* in the heart of the earth" (Matt 12:39-40).

cp384» Read these words again. To the world no other sign would be given to it except that Jesus Christ would be in the grave for "three days and three nights." The sign that proved that Jesus Christ was the Messiah was the sign of him being in the grave for three days and three nights and thereafter being resurrected as other parallel scriptures indicate.

cp385» Jesus Christ said he would be in his tomb for exactly three days and three nights, not from about 6 PM Friday to about 6 AM Sunday morning (36 hours) as tradition has it ("But from the evening of the burial to the dawn of the resurrection are thirty-six hours..." On the Trinity, by Augustine, Book IV, Chap. 6). Jesus Christ did not make a mistake, he knew his fate. When you examine all the scriptures on the duration of Christ's time in the grave it can only be three full days and three full nights. In this paper we will examine these scriptures.

**cp386**» This is very important. This is not something to give little weight to. Jesus Christ knew he was going to be in the grave for 3 days and 3 nights as scripture indicates, and as we will prove in the remainder of this section.

cp387» Christ did not make a mistake, but traditionalists are making a mistake teaching their misunderstanding of scripture. Why believe anything that Jesus Christ said, if he was wrong about the time he was going to be in the grave, he was probably wrong about other things he said. Jesus Christ said he was going to be in the grave ("heart of the earth") for three days and three nights. He did not say he was going to be in the grave for two nights and one day or any other combination except — three days and three nights. There are scriptures that show how Jesus was in the grave for three full days. Why not believe these scriptures? Why do many still doggedly hold to the mistaken tradition? Is tradition that strong?

**cp388»** In *The NIV Study Bible*, Zondervan — 1985, it says in its notes concerning Matt 12:40:

• "12:40 *three days and three nights*. Including at least part of the first day and part of the third day, a common Jewish reckoning of time."

This is a mix of two truths. It is a common Hebrew reckoning of time to include part of the first day and part of the last day when counting days inclusively. When the Hebrews used such statements as, "today, tomorrow, and the next day," they meant in some cases not full 24 hour days (see CP3; Exo 19:10-16; Lev 7:16-18; 19:6-7; Luke 13:32). Depending on what time of the day David spoke in 1 Samuel 20:5, the phrase 'the third day,' may indicate three full days (see verses 20:5, 12, 18-19, 24, 27, 34-35; 21:5; see Esther 4:16; 5:1) because David qualified the third day by saying "the third *day* at evening." Just because it is *possible* in scripture for the phrase "three days and three nights" to mean less than three full 24 hour days, does not mean this is what Christ meant, especially considering all the scriptures pertaining to this event.

**cp389»** In another work, *The Narrated Bible*, Harvest House published in 1984, it says:

"Traditionally the last supper is believed to have occurred on Thursday evening, followed by the crucifixion on Friday afternoon and the resurrection on Sunday morning. However, such reckoning raises at least two questions. First, in an action-packed final week, what reason is there to believe that there would be a whole day of either actual inactivity or activity which is left unrecorded? Second, and far more important — if Jesus is crucified on Friday afternoon and thereafter hurriedly put into the tomb, how can there be sufficient time to match Jesus' own prediction that he would remain in the tomb for three days and three nights before being resurrected? Even if one stretches imagination within the traditional time frame in order to find parts of three days, it is not possible to find three nights.

The resolution of both questions appears to be found in recognizing that the last supper took place on Wednesday evening, followed by the crucifixion and burial on Thursday. Acceptance of that assumption requires an understanding of the Passover, the Feast of Unleavened Bread, and the way in which the Jews reckon time. As for the reckoning of time, the Jewish day begins at sunset on the previous evening. This means, for example, that our Wednesday night is actually [the Jews'] Thursday ..." (pp. 1454-1455).

This opinion is closer to the truth, but not close enough, for if the crucifixion was on Thursday instead of Friday, there still would **not** be three full days and nights between when Jesus was put in the grave and when he was resurrected.

cp390» The resurrection did *not* occur on Sunday morning at sunrise as commonly taught today. Yes, as we will see, Jesus was resurrected at the very end of the week. But he was resurrected *on* the very late evening of Saturday — the Sabbath, the seventh day, not on Sunday morning (see below). The Jews "dawn" was *not* the same dawn as we understand it today. The words "morning," "evening," and "dawn" are used differently depending upon when the 24 hour day is said to end, or begin (see, "Dawn or Light," below).

### Jews' Day Started After Sunset

cp391» To the Jew the new 24 hour day period started at sunset, not at midnight (Lev 23:27, 32; Deut 16:6, cf Neh 13:19 & Lev 22:6-7; see God's Appointed Times and Seasons, under "Passover"). It begins to get dark or deep shadowing appear before a new day begins (Neh 13:19, see Hebrew). Shortly after the sun goes down it gets dark (Gen 15:17; 28:11, see Hebrew; see John 20:1 in context with Matthew, Mark and Luke, see Greek text). A Jewish day is from evening to evening (Lev 23:32, 27). And it is the evening time when the sun goes down (Deut 16:6). Even today, the Jews celebrate their Sabbath (Saturday) each week beginning after sunset Friday (see *Comprehensive Hebrew Calendar*, by Spier, p. 3).

### Our "Morning," "Evening," and "Dawn"

cp392» Today, our 24 hour day ends in the middle of the night, at 12 midnight, or 24:00 P.M. or 00:00 A.M. (Notice the ambivalence here.) Our "early morning" is right after midnight and it remains early morning until sunrise. At sunrise it is the "morning" of a new day (meaning the "sun light" time of the 24 hour day), and it remains morning until noon. Today our "evening" is in the night part of the 24 hour day before 12 midnight, or that is, the last part of the 24 hour day, and sometimes "evening" includes the last parts of sunlight, especially when the sun sets late "in the evening" such as during Summer. When it is *late* evening it is the time period just before 12 midnight, or at the very end of the 24 hour day. According to many dictionaries, the "evening" is the "latter part of the day" (meaning the 24 hour day); the evening is "in some parts of the South, in rural areas, and in parts of England, the period from noon through sunset and twilight" (*Webster's New* 

World Dictionary, 1964). And "morning" is the beginning of the day. The meaning of **dawning of a new day**, depends on if we are referring to the new day-light time or the "dawning" of the 24 hour day, which begins for most today at midnight. Our "dawn" begins either right after midnight for the beginning of the new 24 hour day, or our "dawn" begins at sunrise for the beginning of the day light.

### Jews' "Morning," "Evening," and "Dawn"

cp393» But to the Jews, because their 24 hour day ended at the sunset, "very early dawn" was right after sunset, and it remained early or early dawn until sunrise. At sunrise it was also the "morning" of the new day (meaning "morning of the sun light"), and remained morning (of the sunlight) until noon. To the Jews "evening" was the time after noon time when the sun was setting in the sky. Late evening to them was the hours to moments before sunset. Their "dawn" was the beginning of either the 24 hour day or the beginning of day light (see "Dawn or Light," below).

#### Some Reasons for the Confusion

cp394» Because of the equivocal nature of the term "day," because the term "dawn of the day" can mean either the "dawn of day light" or the "dawn of the new (24 hour) day," because of the lack of knowledge of Old Testament culture (or even a desire to rid the "church" of all Jewish things), because of the great vagueness of starting a count of days at the very end/beginning of a day (see next paragraph), and because of the always strong nature of tradition, the tradition continues about the Friday burial of Jesus Christ the man. But there is no excuse to continue this wrong tradition, for there are sufficient scriptures to indicate that Jesus Christ was buried for three days and three nights.

### **Counting Days**

cp395» There is a method of counting days inclusively in which the first day of the count is started at any time within the day (see Exo 19:10-11; Lev 7:15-17; 19:5-7; for years see: 2 Kings 19:29; Jer 25:3). They could say, for example, today, tomorrow, and the next day. The "next day" being the third day for a count of three days (Exo 19:10-11; Luke 13:32). Today equals the first day, tomorrow the second day, and the next day is the third day. Or they could say, I will meet you the third day. Today being the first day, tomorrow the second day, and the next day the third day. There is a vagueness to this kind

of counting because usually when someone counts like this the first day of the count and the last day of the count need not be full 24 hour days. Today is the first day even if they started their counting from the beginning, middle, or end of it. The second day is the second day throughout. The third day is the third day at any time from the beginning to the end of the day. But there is even a greater vagueness if they started counting the days at the very end or very beginning of a day. Were they beginning their count from the very end of the "today" or from the very beginning of "tomorrow"? This is what happened to the three days in which Christ was buried: the count of the three days began at exactly the end/beginning of a day. Although when they counted three days they could have meant less than three full days, in no way was the count of three days more that 72 hours.

**cp396»** There are counts of days that seem to indicate full days (Num 29:12, 17, 20, 23, 26, 29, 32, 35; Est 4:16-5:1; Jonah 1:17; Matt 12:40).

### **More Than 36 Hours**

cp397» Today most think that Christ died on a Friday afternoon and was resurrected to life on the next Sunday morning at or near sunrise. If this tradition is correct then Christ was only in the grave for about 36 hours. But Christ was very emphatic about his foreknowledge that he would be in the grave for three days and three nights. Most who believe that Christ was in the grave for only about 36 hours also believe that Jesus Christ is God. Can God make a mistake? Can Jesus Christ make a mistake? Concerning the three days and three nights in the grave Christ was most emphatic. In fact he was more emphatic about his time in the grave than about any other statement or any other belief he spoke on.

### Death and Resurrection, Scriptures

**cp398**» Let's look to see how scripture for close to 2,000 years has been manifesting the truth concerning Jesus's statement that he was to be buried for three days and three nights and then be resurrected to life.

cp399» Note the scriptural proof that Jesus Christ the man died about 3PM to 4 PM and was buried at the very last part of the evening just before a Sabbath day:

### (A) Time and Day Buried

- It was the evening of the day (day light time and the 24 hour day) when Jesus died (Mark 15:42; Luke 27:57), about the ninth hour of the day light time (Mark 15:33ff; Matt 27:45ff; Luke 23:44ff).

  There are 12 hours¹ in the day light time (John 11:9), thus it was 3PM to 4 PM in the afternoon when Jesus died. It was the evening time, about two to three hours before the sunset.

  They took down Jesus' body, prepared it and buried it (Mark 15:43ff; Matt 27:57ff; Luke 23:50ff; John 19:38ff), just at the very end of the Jews' Preparation day (John 19:14, 31, 42; cf Matt 27:62) as a Sabbath drew near (Luke 23:54).
- John 19:33ff with Deut 21:23 (see Josh 8:29; 10:26-27) indicate that the body of Jesus could not remain on the cross (tree, stake) during the night, but must be removed that very day before sunset.

cp400» But what Sabbath? The Preparation day of the Passover week (note John 19:14) is the day just before the seven days of the Passover Festival of Unleavened Bread. It is the day when the Passover lamb is killed. It is the 14th of Nisan according to the Jewish Calendar. It is just before the first annual Sabbath of the Passover week (see "Passover" in our paper called "God's Appointed Times and Seasons" [NM16]).

cp401» The Passover week had two special or annual Sabbaths besides the regular weekly one: one of these annual Sabbaths was on the 15th of Nisan while the other was on the 21st of Nisan (Num 28:17-18, 25; Deut 16:8; Exo 12:18; see "God's Appointed Times and Seasons" paper [NM16]). Of course there was a regular weekly Sabbath within the Passover week. At the time of Jesus Christ the man's death the 14th day was the Passover day when the lamb was killed (Christ is the antitypical Lamb — the real Passover — 1 Pet 1:19; Heb 9:14; 1 Cor 5:7), it was also the Preparation day (for the Passover lamb and meal), and as scripture projects it was on a Wednesday the year Christ died. Therefore Thursday (15th) was the first annual Sabbath, and Saturday (17th of Nisan) was the regular weekly Sabbath.

<sup>&</sup>lt;sup>1</sup> The length of hours of the day and night are not necessarily equal

### Review of "(A) Time and Day Buried"

cp402» Jesus Christ the man died on the evening of the 14th of Nisan, a Wednesday, which was the Preparation day of the Passover festival. According to the Law, the passover was sacrificed in the evening, at the going down of the sun (Deut 16:6). Because Christ fulfilled this scripture, Christ was sacrificed in the evening, at the going down of the sun. He was buried just before sunset, or at sunset, just before the 15th of Nisan, an annual Sabbath of the Passover week. Three days later was the very late part of the regular weekly Sabbath, Saturday, the 17th of Nisan.

**cp403**» Note some of the important scriptures concerning the *length* of time that Jesus would spend in the grave:

### (B) Length of Time Buried

- Matt 12:40 "in the heart of the earth three days and three nights" (Thus He was 'buried' for three days and nights or 72 hours, but He died three hours before He was buried.)
- Mark 8:31 (9:31) "and be killed and *after* three days to rise up. (Notice He was 'killed' and after three days He was to be raised up from the grave. He died about 3 PM on a Wednesday. The first day after He was killed was Thursday, the second day was Friday, the third day was Saturday. He was resurrected at the very end of Saturday, the Sabbath. See 1 Samuel 20:5-21:5 for counting method.)
- Matt 16:21 (17:23) "and be killed and *the* third day be raised up."
- Luke 9:22 "and be killed and *the* third day to be raised up."
- John 2:19, 21 "destroy this temple, and *in* three days I will raise it up ... but he spoke about the temple of his body."

These last three verses speak about being *raised up* on the third day. He was *laid down* into the earth at the very end/beginning of Wednesday/Thursday. Thus the first day was Thursday; the second day was Friday; the third day was Saturday. He was *raised up* at the very end of the third day, Saturday – the Jews' Sabbath after three full days in the earth.

	0	)	Three I	Days ar	nd Thre	e Nigh	ts		
Wedn	esday	Thur	sday	Frie	day	Satu	rday	Sui	nday
24 ho	24 hour day		24 hour day		24 hour day		24 hour day		ur day
night	day	night	day	night	day	night	day	night	day
14 Nisa Prepara day for Passov	ation the	an ar	over nnual bath	Womer spices 16:1)	,		eekly bath		
,	efore or unset >	First	Day	Secor	nd Day	<b>Resu</b> just b	rrected efore or sunset>		(sheaf of ts - Lev )

Resurrected after three full days (72 hours) in the grave at the very end of the 3<sup>rd</sup> day, just before the 4<sup>th</sup> day of the count

cp404» In order to fulfill all these scriptures (A) & (B):

- (1) According to Matt 12:40; John 2:19, 21, Jesus *must* have been resurrected exactly three days and nights after he was placed in the grave.
- (2) According to point (1) and with Matt 16:21; 17:23; and Luke 9:22, Jesus *must* have been resurrected on the very end of the third day (1= Thur.; 2= Fri.; 3=Saturday the Sabbath).
- (3) According to points (1) and (2) and with Mark 8:31 and 9:31, Jesus *must* have been resurrected three days after His death towards the very beginning of the fourth day (Sunday first day of the new week).

cp405» Therefore in order to fulfill the very word of Christ about his burial for the three days and nights, and to fulfill the scriptures of the account of Jesus's death, burial, and resurrection, Jesus would have to have been buried at Wednesday sunset, between the last part of Wednesday and the first part of Thursday, and he would have to be resurrected 3 full days and 3 full nights later at the time between the last part of Saturday and the first part of Sunday (see Collation of Scriptures below). And scripture does indicate that Jesus died near the *very* end of Wednesday (4th day of the week), was buried just before or at sunset, and was in the grave three full days (5th, 6th, & 7th) to the *very* end of Saturday (the Sabbath — 7th day) or very beginning of Sunday, and he was resurrected up to life at the very end of

Saturday or the very beginning of Sunday, which was the first day of the new week.

### **Correct Translations**

**cp406**» Notice the correct translation and explanation in the first column below and the traditional and wrong translations in the second and third columns.

### Notice from the Greek text, Matt 28:1-2:

"now late in the week towards the dawn of the first of the week came Mary the Magdalene and the other Mary to view the grave, and look! a great quake occurred, for the angel of the Lord having descended out of heaven and had come to the stone and rolled it away and was sitting on top of it."

"now late [#3796, Strong's Conc.] in the week [the latest it can be in a week is in the very last part of the Sabbath -- the 7th day of the week] towards the dawn [#2020, from #2014 -- thus towards the appearing of the new day, "to dawn, Mat. 21.1; hence, used of the reckoned commencement of the day, to be near commencing, to dawn on, Luke 23.54" --Anal Gk Lex] of first of the week came Mary the Magdalene and the other Mary to view the grave, and look! a great quake occurred [aorist verb -- a verb of action not time], for the angel of the Lord having descended [aorist verb] out of heaven and had come [aorist] to the stone and rolled [aorist] it away and was sitting on top of it."

#### From the King James Version, Matt 28:1-2:

"In the end of the Sabbath, as it began to dawn toward the first (day) of the week, came Mary Magdalene and the other Mary to see the sepulcher. And, behold, there was a great earth-quake: for the angel of the Lord descended from heaven, and came and rolled back the stone from the door, and sat upon it."

### From the New King James Version, Matt 28:1-2:

"Now after the Sabbath, as the first (day) of the week began to dawn, Mary Magdalene and the other Mary came to see the tomb. And behold, there was a great earthquake; for an angel of the Lord descended from heaven, and came and rolled back the stone from the door, and sat on it."

### And from the Greek text, Luke 23:56b and 24:1-3:

"And the Sabbath indeed they rested according to the commandment. But to the first of the week they came upon the tomb (at) early dawn bearing what they got ready -- spices. But they found the stone was rolled away from the memorial tomb. They entered but did not find the body."

"and the Sabbath indeed [7th day of the weekl they ['the women' v. 55] rested [aorist verb -- a verb of action not time] according to the commandment [Exo 20:8]. But to the first of the week [the last day of the week is the Sabbath, our Saturday, which they rested, the first of the next week is Sunday, thus it was at ('to the') the very first of the new week] they came [aorist verb] upon the tomb (at) early [or the 'base' of -- #901 or #898] dawn [#3722 used in the Greek version of the OT for Hebrew shachar --#7837 from #7835 or 7836 -- which has a prime meaning of 'to be black,' Anal Heb Lex, p. 709, Zondervan, 1970] bearing what they got ready -- spices [these spices were prepared after the Sabbath of the 15th of Nisan, see 'Collation of Scripture,' and the "God's Appointed Times" paper]. But they found the stone was rolled away from the memorial tomb. They entered but did not find the body."

#### From the King James Version, Luke 23:56b and 24:1-3:

"And rested the Sabbath day according to the commandment. Now upon the first (day) of the week, very early in the morning, they came unto the sepulcher. bringing the spices which they had prepared, and certain (others) with them. And they found the stone rolled away from the sepulcher. And they entered in, and found not the body of the Lord Jesus."

### From the New King James Version, Luke 23:56b and 24:1-3:

"And they rested on the Sabbath according to the commandment. Now on the first (day) of the week, very early in the morning, they, and certain (other women) with them, came to the tomb bringing the spices which they had prepared. But they found the stone rolled away from the tomb. Then they went in and did not find the body of the Lord Jesus."

### Late or After the Sabbath?

cp407» Luke 24:1 is speaking about the dawning of darkness, right near the time of sunset. Notice further proof in Matt 28:1: "Now *late* (or closure) of the week, towards the first (day) of the week, came Mary the Magdalene and the other Mary to view the grave" (Matt 28:1, Greek text). Here it says, late in the week as it was dawning on toward the first day of a new week, they went to the tomb. How late in the week? The last day, and the last moments of that day. It was still the Sabbath when they set out to the tomb. But it was *late* on the Sabbath. How late? — toward the dawning on the first day (Sunday). As we have shown you, the day, to the Jews, ended at *sunset*. Thus, the time period of Matthew 28:1 is at dusk, or at the dawning

on of darkness. They *started* out to the tomb as it was dawning on towards darkness, *towards* the beginning of Sunday, or near the time of sunset.

cp408» Now the "late" in "late of the week" in Matt 28:1 is by some translated as "in the end" (KJV), or as "after" (NKJV & NIV), but the King James II, American Standard Version, the New American Standard Version among others has it "late in the week" or "late on the Sabbath." The word translated "late" or "end" by some is mistranslated by others as, "after." The Greek word is opse which is Strong's #3796. According to Strong it is only by the extension of the base meaning ("late") that it may to some mean, "after." Many of those trying to prove that opse means "after" point out Matt 28:1 as proof (Anal. Greek Lexicon; Thayer's Greek Lexicon). But in Thayer's Lexicon, which is a translated and edited version of Professor C.L. Wilibald Grimm's Greek-Latin Lexicon (based on a work by C.G. Wilke), Thayer himself disagreed with Grimm and said:

"But the examination of the instances just cited [including Matt 28:1] (and others) will show that they fail to sustain the rendering *after* (although it is recognized by ...); *opse* followed by a genitive seems always to partitive, denoting *late in* the period specified by the genitive (and consequently still belonging to it), cf ...."

cp409» Ethelbert W. Bullinger, in his A Critical Lexicon and Concordance, p. 249, under "END (in the)" says: "opse late, after a long time ... late in the day, at evening, (opposite to proi)." Opse is in meaning opposite to proi (#4404). Proi means, "early" or "dawn" or "morning." This is so because proi comes from pro which means "before." The proi part of the day is the before or early part of the day, while opse is the late or closure part of the day. Those who "extend" this word opse to mean "after" do so because they fail to believe and understand that Jesus Christ was buried on the very last or late part of the day, and was resurrected three full days later on the late (opse) part of the day (Matt 28:1-3). And right after Jesus was resurrected it was the very early or base part of the next day (Mark 16:2ff "very early in the morning"; John 20:1 "comes Mary Magdalene early when it was now [#2089] dark"; Luke 16:1 "At early dawn"; Matt 28:1, "towards the").

**cp410»** As you can see there is no reason to project Jesus as an unknowledgeable prognosticator, or being wrong about his length of burial. Why continue with tradition when it makes Christ's word a lie? Remember the WORD was in Christ (*God Papers* [GP4]).

### Dawn or Light

**cp411»** The Greek word translated "dawn" by the KJV in Matt 28:1 is Strong's #2020 (from #2014). This same word is translated "drew on" in Luke 23:54:

And that day was the preparation, and the Sabbath *drew* on."

This Greek word in its most literal meaning is "to become visible," to appear, to show forth (Thayer's Greek Lexicon and see Strong). The "dawn" in Matt 28:1 is the drawing near or manifestation of the first day of the new week, which is Sunday, which for the Jews started at Sunset.

### Women Buy Spices: When?

cp412» In the chronology of Christ's death and burial, as his body was being laid in the rock grave at the very end of the 14<sup>th</sup> of Nisan, Mary Magdalen and Mary the mother of Joses "beheld where he was laid" (Mark 15:47; Luke 23:55). Christ was buried at the end of the day that John called the preparation day, the day before the Passover festival's first annual Sabbath on the 15<sup>th</sup> of Nisan (John 19:14; Num 28:17-18, 25; Deut. 16:8; E.o. 12:18; see "God's Appointed Times and Seasons" paper [NM16]).

Num 28:16 Then on the fourteenth day of the first month shall be the LORD'S Passover. 17 On the **fifteenth day of this month** *shall be* a feast, unleavened bread *shall be* eaten for seven days. 18 On the first day *shall be* a holy convocation; you shall do no laborious work.

We see that the 15<sup>th</sup> of the month started the seven days of unleavened bread. On the first day of unleavened bread was a "holy convocation, you shall do no laborious work." So after the women saw where Christ was laid at the end of the 14<sup>th</sup> of Nisan, they rested on the 15<sup>th</sup> because it was a Sabbath on which no work was to be performed: "And when the Sabbath was past, Mary Magdalene, and Mary the mother of James, and Salome, had bought spices in order to come and anoint him" (Mark 16:1). So on the 16<sup>th</sup> of Nisan they bought spices because the 15<sup>th</sup> was a Sabbath on which they could not work or buy anything. Another scripture tells us that the women then prepared the spices on this day (16<sup>th</sup>) and then rested the next day (17<sup>th</sup>) according to the commandment (Luke 23:56). The commandment they are referring to is the fourth commandment. The fourth commandment forbids work on the weekly Sabbath (Exodus 20:8-11). So the 17<sup>th</sup> of Nisan the year

Christ was killed, was on a Saturday. This means that the 14<sup>th</sup> of Nisan was on a Wednesday.

Today's popular theory that Christ died on Friday cannot explain the scriptures pertaining to the women buying the spices after one Sabbath and before another Sabbath so they must ignore or leave out pertinent parts of these scriptures. But we can quote them with assurance, for we are correct in this matter and they are not.

### Time of Resurrection By The Angel

cp413» Now notice *when* Christ was resurrected: "And behold, there was a great earthquake: for the angel of the Lord descended from heaven, and came and rolled back the stone from the door, and sat upon it." (Matt 28:2) The very next verse after Matt 28:1 where it says they came to the tomb near dusk ("late"), tells us the exact time the angel of the Lord resurrected Jesus the man. This angel is the same angel of the LORD as we've explained before (*God Papers* [GP3]).

**cp414»** With the correct translation from Greek and the knowledge of when the day began in those days, we know that Christ was resurrected at dusk, at the dawning on of the darkness, at the *late* part of the Sabbath (See Collation of Scriptures).

cp415» Thus, Matthew 28:1 tells us when the women set out to the tomb (at dusk); and Luke 24:1 with correct translation shows them still traveling to the tomb (right after sunset); and, John 20:1 shows them reaching the tomb (at early Sunday, while it was still getting dark [see Greek], for the sunset had just occurred as Matthew 28:1 and Luke 24:1 project); and they came after the "rising of the *sun*" (or of Jesus, for it is his resurrected glorified symbol as was the moon his symbol before his resurrection; Malachi 4:2, see *God Papers* [GP5, Notes]).

### Rising of The Sun

**cp416**» Another apparent problem to the three full days of burial is the statement in Mark 16:2 about the "sun" being risen already when they came to the tomb exceedingly early on the first day of the week. But there is no more a problem here than with the scripture that equated water with Spirit:

"out of his belly shall flow rivers of living water. But this spoke he of the *Spirit*" (John 7:38-39).

Or, it is no more a problem than the equating of Spirit with the wind or air:

"the wind blows where it wishes and you hear the sound thereof, but cannot tell where it comes, and where it goes: so is everyone that is born of the *Spirit*" (John 3:8).

Or, It is no more a problem than when Jesus spoke of others eating his body so that they could live into the age ("live for ever" — KJV):

"I am that bread of life ... if any man eat of this bread, he shall live into the age: and the bread that I will give is my flesh ... For my flesh is food indeed, and my blood is drink indeed. He that eats my flesh, and drinks my blood, dwells in me, and I in him ... so he that eats me, even he shall live through me ... he that eats this bread shall live into the age ... Many therefore of his disciples, when they had heard this, said, This is a hard saying; who can understand it ... [Jesus answers their misunderstanding by saying] It is the **Spirit** that gives life; the flesh profits nothing. **The words I speak to you are spirit, and they are life**. But there are some of you who do not believe" (John 6:48, 51, 55-56, 57, 58, 60, 63).

cp417» To physically eat Christ's body or flesh and drink his blood is cannibalism. Of course some did not believe these above words. They could not see the metaphorical meaning of the words. The Bible calls those who cannot discern the metaphorical sense correctly as being blind to the real Spiritual meaning of scripture. Some could not understand the Spiritual words that Christ spoke because they did not have the Spirit:

"These things we also speak, not in words which man's wisdom teaches but which the Holy Spirit teaches, comparing spiritual things with spiritual. But the natural man does not receive the things of the Spirit of God, for they are foolishness to him; nor can he know them, because they are spiritually discerned" (1 Cor 2:13-14).

Christ's words in John 6 are foolishness to most people, but they have Spiritual meaning to those with the Spirit (see God's Appointed Times and Season, under "Spiritual Bread").

**cp418»** Throughout all of our papers we show again and again that there is a type and antitype or a physical and spiritual meaning to all scriptures in the Bible (see "Duality Paper" [BP4], etc). The rising of the SUN in Mark 16:2 speaks of Christ in a metaphorical way as does the following scriptures:

- "But unto you that fear my name shall the *SUN of* righteousness arise with healing in his wings" (Mal 4:2).
- "Arise shine, for your *Light* is come and the glory of the YHWH is *Risen* upon thee" (Isa 60:1).
- "And *he* shall be as the *Light* of the morning, (when) the *Sun Rises*" (2 Sam 23:4).

cp419» Mark 16:2 was written in the time period *after* the resurrection. Mark had the Spirit then and could understand the Spiritual things of the Bible. He saw the scriptures in the Old Testament of the sun rising, and knew that this "sun rising" pointed to the resurrection of Jesus Christ as other scripture pointed to the coming of Jesus. Thus he called the resurrection of Jesus, "the rising of the sun," meaning in the Spiritual sense, the rising from death of our Savior, Jesus Christ. The only "problem" with scripture in explaining the three full days in the grave is the 'sun' rising scripture, but to those who understand that Jesus did not make a mistake about his time in the grave, and to those who understand Spiritually or metaphorically the scripture, this is no problem. There is more of a problem for those that do **not** believe in the full three days and three nights in the grave, for they are in essence calling Christ a liar.

#### **Christ's Ascension**

cp420» It was only the angel of the Lord who came (Matt 28:2). One angel came to the tomb. This is important, very important, for the women saw visions of two angels (John 20:12) or two men (Luke 24:4) or one young man (Mark 16:5) or one angel (Matt 28:5). Now we see that *one* angel came out of heaven to resurrect Christ the dead *man* (Matt 28:2). From here let's see how and when Jesus ascended to his Father.

### Two Men; Two Angels?

**cp421»** The women (Mary Magdalene; Mary; Joanna; and other women, John 20:1; Luke 24:9-10) saw **two men**, according to Luke 24:4; or **an angel** according to Matthew 28:5; or **a young man** according to Mark 16:5. (See Robertson's Harmony of the Gospel, or our notes.) In Luke's account it says the two

men spoke ("they said"). In the Matthew account it says the angel spoke. In the Mark account it says a young man spoke. Each of these renditions have the two men, the angel, and the young man, saying about the same thing. Surely this proves the Bible contradicts itself? Absolutely not!

cp422» Notice in Luke 24:5, "they said." Two spoke, for just before (V. 4), Luke said there were two men in the tomb. In Mark it says a young man was on the right, on the right there was a young man. Who was next to this young man? It was the angel (who looked like a man) who was next to the young man (Matt 28:5). Who came to resurrect Christ? It was the angel of the Lord (Matt 28:2-4). As we have shown you before (God Papers [GP3]) the angel of the Lord could either manifest himself as looking like a man, or like a flaming-fire. When he came to resurrect Christ, he came looking like a man. Thus, the young man (Christ) was on the right of the two who looked like men, and both spoke at once. There is no contradiction here. The scripture says merely that there were two who both looked like men, but one was a young man (Christ), and the other "man" was the angel of the Lord, who looked like a man.

cp423» After this event, the women went to the disciples (Luke 24:9-11; John 20:2; Luke 24:22-24) to tell them what had happened. With Peter and another disciple the women went back to the tomb that very night of Sunday (after the dawning of Sunday, as explained before). But on reaching the tomb they found nothing, but some linen cloths of Christ (John 20:6-7; Luke 24:12). Then the two disciples returned to the house of the disciples where they were meeting (John 20:10). But Mary Magdalene tarried behind, she was crying outside the tomb. Then she looked inside and saw two angels, according to John 20:11-13.

cp424» Now notice the two disciples had examined the tomb and did not see the two "men" that the women had seen, but they did see Christ's body was gone (Luke 24:22-24; John 20:6-9). Then these disciples left the tomb and headed back to the house again, but Mary stayed behind crying outside the tomb. Next she looked in and saw two angels. But the texts about the resurrection say only *one* angel came to resurrect Christ. Notice they were clothed in white. But so was the young man clothed in a white robe (Mark 16:5). Thus, as Luke called the angel of the Lord (Matt 28:5) and the resurrected Christ (Mark 16:5) two "men," so also did John call Christ and the angel of the Lord, two "angels." These two looked like men, but with their bright or white robes they also looked like angels. What do angels look like? They looked like burning flames (Heb 1:7; Acts 7:30). The bright, white light of their robes made them look like fire, thus, they looked like angels, and like men.

cp425» Mary, after the "angels" spoke to her, turned around "and beholds [that] the Jesus *had* stood, and she not known it was Jesus [standing as one of the two angels]" (John 20:14). Examine the King James Version, it implies she turned around and *then* saw Jesus. This is wrong. For in Greek the word translated "standing" and the words "knew not" are: one, a perfect tense participle, and two, a pluperfect tense verb in the indicative mood (in the 3rd person). Perfect tense words in Greek indicate *past* or *complete* action. Jesus was not standing after she turned, he *had* stood there before she turned. In other words, Jesus *had* stood with the angel of the Lord (as two "angels"), but Mary did not comprehend it. Further, a pluperfect tense word ("knew not" KJV) indicates a "*past state* resulting from *previous action*" (*Exegetical Grammar*, by J. Harold Greenlee, Eerdmans Pub, 1963). What was the previous action? It was the act of Mary turning. Thus, *before* this action Mary had seen Jesus, but "knew not" it was Jesus.

cp426» Fine. Mary had turned away from the two "angels" (one being Jesus, but she realized it not), and "Jesus says to her, why ... she supposing him to be the gardener" (John 20:15). She had turned away from the two "angels," then Jesus spoke to her, but she only thought it was a gardener. She must have been upset; this was an emotional evening, they didn't realize Christ was to be resurrected. They thought someone had stolen the body (V. 13). Mary had just seen two "angels" and talked to them. She turns away still crying and Jesus (now behind her, for she had turned away) spoke to her, but she believed it was a gardener. By the unbelievable events and her tears, one must conclude that she was somewhat upset. Now what?

#### **Ascension & Fulfillment of Sheaf of the First Fruits**

**cp427**» "Jesus said unto her [from behind], Mary. She turned herself [she turned now back to Jesus], and said to him, Rabboni, which is to say, Master. Jesus said unto her, *Touch me not*; for I am not yet ascended to my Father: but go to the brethren, and say unto them, I ascend unto my Father, and your Father; and to my God, and your God."(John 20:16-17)

cp428» Notice, Jesus would not let Mary touch him, for he hadn't ascended yet to his Father. Now notice *when* he ascended. "And behold! Jesus met them, saying, All hail. And they came and took hold of his feet, and worshiped him" (Matt 28:9). Who took hold of Christ's feet? — the women leaving the tomb, the *second* time. Remember these women went to the tomb at sunset, and saw two "men." They went to the disciples and told them of it. The disciples rushed to the tomb. On seeing nothing they returned to their house. While they (the two disciples) returned, Mary tarried crying and Christ the resurrected man appeared to her. Then Mary went to

tell the disciples about seeing Christ (John 20:18; Mark 16:10). Through a little comparison, we can see that Matthew 28:9-10 is Mary and the women returning home the *second* time from the tomb (see scripture below).

cp429» Right after Mary had spoken to Christ, Jesus ascended, for as they (Mary and the women, Matt 28:9-10) were returning Christ appeared to them again. But this time he allowed them to touch him. Yet what was his excuse for not allowing Mary to touch him (John 20:17)? — he hadn't yet ascended to his Father. Thus, because seconds or minutes later he did allow Mary and the other women to touch him, he *must* have ascended to his Father. This ascension of Christ fulfilled Spiritually Lev 23:9-14, which occurs on a Sunday, the morrow after the Sabbath:

Lev 23:9 Then the LORD spoke to Moses, saying, 10 "Speak to the sons of Israel and say to them, 'When you enter the land which I am going to give to you and reap its harvest, then you shall bring in **the sheaf of the first fruits of your harvest** to the priest. 11 'He shall wave the sheaf before the LORD for you to be accepted; on the day after the Sabbath the priest shall wave it.

Read "Sheaf of the First Fruits" in the NM 16, "God's Appointed Times," for more information on the sheaf of first fruits.

Also see Prophecy Papers 7 [PP7] under "Sheaf of the First Fruits," and Chronology Papers 4 [CP4] under "Ascension."

# Collation of Scriptures Pertaining to Christ's Burial and Resurrection

**cp430»** The Biblical scriptures concerning Christ's death were written by four: Matthew, Mark, Luke, and John. They each only wrote just part of the story. In order to understand all that went on at the time of Christ's death; we must put all the scriptures together; we must collate them. The following collation shows Christ's pre-death words were true, he would be in the grave for three full days and nights. The scriptures quoted below are from the BCB translation unless otherwise stated. See above (Correct Translation) for more detailed information of key verses below.

Comments	Scripture	Matt	Mark	Luke	John
Wednesday, 14th of Nisan	Lk 23:54 And it was preparation day, and [the] Sabbath was coming on.			23:54-55	
Christ died on the day of Preparation as the day drew on towards the first annual Sabbath (High day John 19:31) of the Passover festival. The True Passover (Christ) was killed on the 14th day of the first month of the Hebrew's Calendar (Ex 12:6; Num 28:16).	Lk 23:55 And women, who had come along with him out of Galilee, having followed, saw the tomb and how his body was placed.				
Thursday, 15th of Nisan; First Day The first annual Sabbath of the Passover after Christ died was Thursday the 15th of Nisan on the Hebrew or Jewish Calendar (Num 28:17-18).	Lk 23:54 And it was preparation day, and [the] Sabbath was coming on.			23:54 ("Sab. drew near")	

Comments	Scripture	Matt	Mark	Luke	John
Friday, 16th of Nisan; Second Day	Mark 16:1 And the Sabbath being [now] past, Mary of Magdalene, and Mary the [mother] of James, and Salome, bought aromatic spices that they might come and embalm him.		16:1	23:56a	
After the annual Sabbath on the 15th of Nisan, the women buy spices and prepare them for Christ's body on the day after the annual Sabbath, for no Jew was allowed to buy such items on a Sabbath (Neh 10:31). This Sabbath being a High day of the festival, not the weekly Sabbath.	Lk 23:56 And having returned they prepared aromatic spices and ointments,				
Saturday, 17th of Nisan, a weekly Sabbath day ; <u>The</u> <u>Third Day</u>	Lk 23:566 and rested on the Sabbath, according to the commandment.			23:56b	
The women rest on the regular weekly Sabbath	95, mo:				
Late on the Sabbath  The women begin to travel to the tomb before sunset with the spices for the body of Christ.	Mat 28:1 Now late in the week, 1 towards the dawn of the first of the week, 2 came Mary of Magdala and the other Mary to look at the tomb [see Correct Translation]	28:1			
Late Saturday, at sunset; End of The Third Day (very end of Saturday) The angel of the Lord resurrects Christ.	Mat 28: 2 And behold, there was a great earthquake; for an angel of [the] Lord, descending out of heaven, came and rolled away the stone and sat upon it  3 And his look was as lightning, and his clothing white as snow  4 And for fear of him the guards trembled and became as dead men	28:2-4			

Comments	Scripture	Matt	Mark	Luke	John
Towards / near / at Sunday, 18th of Nisan, right at or near sunset and very early in the new 24 hour day, which was the first day of the new week (they reach the tomb at the very end of a	risen.  3 And they said to one another, Who shall roll us away the stone out of the door of the tomb?  [Jesus is the antitypical "sun" as explained in Part 4 of the Chronology Papers]  Lk 24:1 But towards [day] one of the week [Sabbaths] very early indeed in the morning, they came to the tomb, bringing the aromatic spices which they had prepared.		16:2- 3	24:1	20:1a
day) The women continuing to the tomb.	John 20:1a And towards first [day] of the week <sup>3</sup> Mary of Magdalene comes early (darkness yet taken place) to the tomb,				
Sunday, 18 <sup>th</sup> Nisan On reaching the tomb, they see the stone in front of the	Mark 16:4 And when they looked, they see that the stone has been rolled [away] for it was very great.  Lk 24:2 And they found the stone rolled away from the tomb.  John 20:1b and sees the stone taken away from the tomb.		16:4	24:2	20:1b
They then enter the tomb; the body is gone.	Lk 24:3 And when they had entered they found not the body of the Lord Jesus.  Mark 16:5a And entering into the tomb,		16:5a	24:3	
Sunday, still early after sunset, early in the new 24 hour day BUT they see two "men" (one angel [Matt 28:5] and one man [Mark 16:5]; both looked like they were either an angel or a man in bright-white clothes, see CP4).	Lk 24:4 And it came to pass as they were in perplexity about it, that behold, two men suddenly stood by them in shining raiment.			24:4	

Comments	Scripture	Matt	Mark	Luke	John
One of these two was a young man on the right.	Mark 16:5 And entering into the tomb, they saw a young man sitting on the right, clothed in a white robe, and they were amazed and alarmed;		16:5		
The two "men" said, "Why seek"	Lk 24:5 And as they were filled with fear and bowed their faces to the ground, they said to them, Why seek you the living one among the dead?			24:5	
The "angel," "he," "they" continue to	Mat 28:5 And the angel answering said to the women, Fear not, for I know that you seek Jesus the crucified one	28:5-7	16:6- 7	24:6-8	
speak	6 He is not here, for he is risen, as he said. Come, see the place where the Lord lay				
	7 And go quickly and say to his disciples that he is risen from the dead; and behold, he goes before you into Galilee, there shall you see him. Behold, I have told you				
	Mark 16:6 but he says to them, Be not alarmed. You seek Jesus, the Nazarene, the crucified one. He is risen, he is not here; behold the place where they had put him.				
	7 But go, tell his disciples and Peter, he goes before you into Galilee; there shall you see him, as he said to you.				
	Lk 24:6 He is not here, but is risen: remember how he spoke to you, being yet in Galilee,				
	7 saying, The Son of man must be delivered up into the hands of sinners, and be crucified, and rise the third day.				
	8 And they remembered his words;				



Comments	Scripture	Matt	Mark	Luke	John
The women flee the tomb astonished	Mat 28:8 And going out quickly from the tomb with fear and great joy, they ran to bring his disciples word	28:8	16:8		
	Mark 16:8 And they went out, and fled from the tomb. And trembling and excessive amazement possessed them, and they said nothing to any one, for they were afraid.				
The women speak about what they	Lk 24:9 and, returning from the tomb, related all these things to the eleven and to all the rest.			24:9- 10	20:2
saw to the disciples	10 Now it was Mary of Magdalene, and Johanna, and Mary the [mother] of James, and the others with them, who told these things to the apostles.				
	John 20:2 She runs therefore and comes to Simon Peter, and to the other disciple, to whom Jesus was attached, and says to them, They have taken away the Lord out of the tomb, and we know not where they have laid him.				
Their words seemed as foolish talk to the disciples	Lk 24:11 And their words appeared in their eyes as an idle tale, and they disbelieved them.			24:11	
Yet Peter went with the women back to the tomb, but	Lk 24:12 But Peter, rising up, ran to the tomb, and stooping down he sees the linen clothes lying there alone, and went away home, wondering at what had happened.			24:12	20:3- 10
another disciple outran Peter to the tomb; both saw	John 20:3 Peter therefore went forth, and the other disciple, and came to the tomb.				
that the body of Christ was gone.	4 And the two ran together, and the other disciple ran forward faster than Peter, and came first to the tomb,				
They departed wondering, for they didn't understand	5 and stooping down he sees the linen cloths lying; he did not however go in.				
that Christ must first suffer then be resurrected after	6 Simon Peter therefore comes, following him, and entered into the tomb, and sees the linen cloths lying,				
three days.	7 and the handkerchief which was upon his head, not lying with the linen cloths, but folded up in a distinct place by itself.				
	8 Then entered in therefore the other disciple also who came first to the tomb, and he saw and believed;				
	9 for they had not yet known the scripture, that he must rise from among [the] dead.				
	10 The disciples therefore went away again to their own home.				
BUT Mary Magdalene and	Mark 16:9 Now when he had risen, very early towards the first [day] of the week, <sup>4</sup> he appeared first to Mary of Magdalene, out of whom		16:9		20:11-17

Comments	Scripture	Matt	Mark	Luke	John
others (John 20:1	he had cast seven daemons.				
& Matt 28:1) tarried behind; Jesus then appeared to Mary	John 20:11 But Mary stood at the tomb weeping outside. As therefore she wept, she stooped down into the tomb,				
(but Jesus said she couldn't touch him until he ascended	12 and beholds two angels sitting in white [garments] one at the head and one at the feet, where the body of Jesus had lain.				
to his Father).	13 And they say to her, Woman, why do you weep? She says to them, Because they have taken away my Lord, and I know not where they have laid him.				
	14 Having said these things she turned backward and beholds Jesus standing [there] and knew not that it was Jesus.				
	15 Jesus says to her, Woman, why do you weep? Whom do you seek? She, supposing that it was the gardener, says to him, Sir, if you have borne him hence, tell me where you have laid him, and I will take him away.				
	16 Jesus says to her, Mary. She, turning round, says to him in Hebrew, Rabboni, which means Teacher.				
	17 Jesus says to her, Touch me not, for I have not yet ascended towards my Father; but go to my brethren and say to them, I ascend towards the Father of me and Father of you, and [to] my God and your God.				
Moments later Jesus appeared to the women (Mary Magdalene and the others who tarried with her) as they were going back from the tomb to the disciples the second time (this time Jesus allows them to touch him, thus, he in this short time had ascended to his Father).	Mat 28:9 And as they went to bring his disciples word, behold also, Jesus met them, saying, Hail! And they coming up took him by the feet, and did him homage.  10 Then Jesus says to them, Fear not; go, bring word to my brethren that they go into Galilee, and there they shall see me.	28:9-10			
Sunday, after Sabbath sunset	Mat 28:11 And as they went, behold, some of the watch went into the city, and brought word to the chief priests of all that had taken place.	28:11- 15			
While the women continue to the disciples, the	12 And having assembled with the elders, and having taken counsel, they gave a large sum of money to the soldiers,				
guards tell the chief priests a lie	13 saying, Say that his disciples coming by night stole him [while]				

Comments	Scripture	Matt	Mark	Luke	John
when they were	we [were] sleeping.				
explaining what had occurred (see, Matt 28:2-4). Please read these verse to see what they said and how they lied.	14 And if this should come to the hearing of the governor, we will persuade him, and save you from all anxiety.				
	15 And they took the money and did as they had been taught. And this report is current among the Jews until this day.				
The women (Matt 28:8,9,11) continue	Mark 16:10 She went and brought word to those that had been with him, [who were] grieving and weeping.		16:10		20:18
to the house where the disciples were staying at. Mary	11 And when these heard that he was alive and had been seen of her, they disbelieved [it].		11		
tells the disciples that they saw Jesus and they held him and they relate what He said, but the disciples didn't believe.	John 20:18 Mary of Magdalene comes bringing word to the disciples that she had seen the Lord, and [that] he had said these things to her.				
Sunday, during the day light and	Mark 16:12 And after these things he was manifested in another form to two of them as they walked, going into the country;		16:12 -	24:13- 32	
before sunset Christ manifests Himself in another form (different from			13		
Mark 16:9 & John 20:17; but probably like Matt 28:9 &	Lk 24:13 And behold, two of them were going on that same day [Sunday] to a village distant sixty stadia [few miles] from Jerusalem, called Emmaus;				
Luke 24:39) to two disciples going to a village of Emmaus.	14 and they conversed with one another about all these things which had taken place.				
On reaching it they perceived it was Christ who was	15 And it came to pass as they conversed and reasoned, that Jesus himself drawing near, went with them;				
walking and talking	16 but their eyes were holden so as not to know him.				
with them. Then Christ vanished out of sight.	17 And he said to them, What discourses are these which pass between you as you walk, and are downcast?				
	18 And one [of them] named Cleopas, answering said to him, Are you alone sojourning in Jerusalem, and do not know what has taken place in it in these days?				
	19 And he said to them, What things? And they said to him, The things concerning Jesus the Nazarene, who was a prophet mighty in deed and word before the God and all the people;				
	20 and how the chief priests and our rulers delivered him up to				

Comments	Scripture	Matt	Mark	Luke	John
	[the] judgment of death and crucified him.				
	21 But we had hoped that he was [the one] who is about to redeem Israel. Yes, and along with all this, this brings on <i>the</i> third day since these things [v. 20] took place.				
	22 And] certain women from among us astonished us, having been very early at the tomb [on this third day],				
	[The women went to the tomb at the very end of the third reaching the tomb right after Jesus was resurrected on the very beginning of the fourth day, that is, the first day of the new week. See <i>Chronology Papers</i> , Part 4]				
	23 and, not having found his body [right after sunset on the fourth day], came, saying that they also had seen a vision of angels, who say that he is living.				
	24 And some of those with us went to the tomb, and found it so, as the women also had said, but him they saw not.				
	25 And he [Jesus] said to them, O senseless and slow of heart to believe in all that the prophets have spoken!				
	26 Ought not the Christ to have suffered these things and to enter into his glory?				
	27 And having begun from Moses and from all the prophets, he interpreted to them in all the scriptures the things concerning himself.				
	28 And they drew near to the village where they were going, and he made as though he would go farther.				
	29 And they constrained him, saying, Stay with us, for it is toward evening and the day is declining. And he entered in to stay with them.				
	30 And it came to pass as he was at table with them, having taken the bread, he blessed, and having broken it, gave it to them.				
	31 And their eyes were opened, and they recognized him. And he disappeared from them.				
	32 And they said to one another, Was not our heart burning in us as he spoke to us on the way, [and] as he opened the scriptures to us?				
	4				
After this, the two who were going to the village,	Mark 16:14a Afterwards as they lay at table he was manifested to the eleven,		16:14 a	24:33- 35	
returned to Jerusalem and	Lk 24:33 And rising up the same hour, they returned to Jerusalem. And they found the eleven, and those with them, gathered together,				
grouped with the disciples, and told	34 saying, The Lord is indeed risen and has appeared to Simon.				

Comments	Scripture	Matt	Mark	Luke	John
the disciples that Jesus appeared to them (the two being Simon and Cleopas (Luke 24:18, 34).	35 And they related what [had happened] on the way, and how he was made known to them in the breaking of bread.  1CO 15:5 KJV And that he was seen of Cephas,				
At this time, Christ manifested Himself to eleven disciples, but without Thomas (Luke 24:33; John 20:24).	Mark 16:14 Afterwards as they lay at table he was manifested to the eleven, and reproached [them with] their unbelief and hardness of heart, because they had not believed those who had seen him risen.  John 20:19 When therefore it was evening on that day, which was first [day] of the week, <sup>5</sup> and the doors shut where the disciples were, through fear of the Jews, Jesus came and stood in the midst, and says to them, Peace [be] to you.		16:14		20:19
The disciples feared this appearance of Christ who seemed to come from nowhere they thought He was a spirit.	Lk 24:36 And as they were saying these things, he himself stood in their midst, and says to them, Peace [be] unto you.  37 But they, being confounded and being frightened, supposed they beheld a spirit.			24:36- 37	
Jesus questioned their unbelief	Mark 16:14b and reproached [them with] their unbelief and hardness of heart, because they had not believed those who had seen him risen.  Lk 24:38 And he said to them, Why are you troubled? and why are thoughts rising in your hearts?		16:14 b	24:38	
Christ shows the disciples He is flesh and blood	Lk 24:39 behold my hands and my feet, that it is I myself. Handle me and see, for a spirit has not flesh and bones as you see me having.  40 And having said this he showed them his hands and his feet.  John 20:20 And having said this, he showed to them his hands and his side. The disciples rejoiced therefore, having seen the Lord.			24:39- 40	20:20
He eats with them also	Lk 24:41 But while they yet did not believe for joy, and were wondering, he said to them, Have you anything here to eat?  42 And they gave him part of a broiled fish and of a honeycomb;  43 and he took it and ate before them.			24:41- 43	

Comments	Scripture	Matt	Mark	Luke	John
Jesus Christ explains scripture about His death	Lk 24:44 And he said to them, These [are] the words which I spoke to you while I was yet with you, that all that is written concerning me in the law of Moses and prophets and psalms must be fulfilled.			24:44- 49	20:21-25
and gives a commission; Thomas is not with	45 Then he opened their understanding to understand the scriptures,				
them, and Thomas doesn't believe	46 and said to them, Thus it is written, and thus it behooved the Christ to suffer, and to rise from among the dead the third day;				
Christ appeared.	47 and that repentance and forgiveness of sins should be preached in his name to all the nations beginning at Jerusalem.				
	48 And you are witnesses of these things.				
	49 And behold, I send the promise of my Father upon you; but do you remain in the city till you be clothed with power from on high.  John 20:21 [Jesus] said therefore again to them, Peace [be] to you:				
	as the Father sent me forth, I also send you.				
	22 And having said this, he breathed into [them] and says to them, Receive [the] Holy Spirit:				
	23 whose sins you remit, they are remitted to them; whose sins you retain, they are retained.				
	24 But Thomas, one of the twelve, called Didymus, was not with them when Jesus came.				
	25 The other disciples therefore said to him, We have seen the Lord. But he said to them, Unless I see in his hands the mark of the nails, and put my finger into the mark of the nails, and put my hand into his side, I will not believe.				
	ACT 1:4a KJV And, being assembled together with them, commanded them that they should not depart from Jerusalem, but wait for the promise of the Father				
	5 For John truly baptized with water; but ye shall be baptized with the Holy Ghost not many days hence.				
Eight Days Later  Jesus appears eight days later to	John 20:26 And eight days after, his disciples were again within, and Thomas with them. Jesus comes, the doors being shut, and stood in the midst and said, Peace [be] to you.				20:26-31
the 12 disciples; Thomas sees Christ and believes	27 Then he says to Thomas, Bring your finger here and see my hands; and bring your hand and put it into my side; and be not unbelieving, but believing.				
calls Him his Lord and his God.	28 Thomas answered and said to him, The Lord of me and the God of me.				
	29 Jesus says to him, Because you have seen me you have				

Comments	Scripture	Matt	Mark	Luke	John
	believed: <sup>6</sup> blessed they who have not seen and have believed.				
	30 Many other signs therefore also Jesus did before his disciples, which are not written in this book;				
	31 but these are written that you may believe that Jesus is the Christ, the Son of the God, and that believing you might have life in his name.				
	£				
Thereafter Christ later	John 21:1 After these things Jesus manifested himself again to the disciples at the sea of Tiberias. And he manifested [himself] thus.				21:1-23
appeared again near the sea of Galilee (Tiberias)	2 There were together Simon Peter, and Thomas called Didymus, and Nathanael who was of Cana of Galilee, and the [sons] of Zebedee, and two others of his disciples.				
as he said he would appear to all the brethren (Mark 16:7; Matt	3 Simon Peter says to them, I go to fish. They say to him, We also come with you. They went forth, and went on board, and that night took nothing.				
28:7;Luke 24:6-7; Matt 28:9-10; etc.)	4 And early morn already breaking, Jesus stood on the shore; the disciples however did not know that it was Jesus.				
	5 Jesus therefore says to them, Children, have you anything to eat? They answered him, No.				
	6 And he said to them, Cast the net at the right side of the ship and you will find. They cast therefore, and they could no longer draw it, from the multitude of fishes.				
	7 That disciple therefore whom Jesus loved says to Peter, It is the Lord. Simon Peter therefore, having heard that it was the Lord, girded his overcoat [on him] for he was naked, and cast himself into the sea;				
	8 and the other disciples came in the small boat, for they were not far from the land, but somewhere about two hundred cubits, dragging the net of fishes.				
	9 When therefore they went out on the land, they see a fire of coals there, and fish laid on it, and bread.				
	10 Jesus says to them, Bring of the fishes which you have now taken.				
	11 Simon Peter went up and drew the net to the land full of great fishes, a hundred and fifty-three; and though there were so many, the net was not rent.				
	12 Jesus says to them, Come [and] dine. But none of the disciples dared inquire of him, Who are you? knowing that it was the Lord.				
	13 Jesus comes and takes the bread and gives it to them, and the				

Comments	Scripture	Matt	Mark	Luke	John
	fish in like manner.				
	14 This is already the third time that Jesus had been manifested to the disciples, being risen from among [the] dead.				
	15 When therefore they had dined, Jesus says to Simon Peter, Simon, [son] of Jonas, do you love me more than these? He says to him, Yes, Lord; you know that I am attached to you. He says to him, Feed my lambs.				
	16 He says to him again a second time, Simon, [son] of Jonas, do you love you me? He says to him, Yes, Lord; you know that I am attached to you. He says to him, Shepherd my sheep.				
	17 He says to him the third time, Simon, [son] of Jonas, are you attached to me? Peter was grieved because he said to him the third time, Are you attached to me? and said to him, Lord, you know all things; you know that I am attached to you. Jesus says to him, Feed my sheep.				
	18 Truly, truly, I say to you, When you were young, you girded yourself, and walked where you desired; but when you shall be old, you shall stretch forth your hands, and another shall gird you, and bring you where you do not desire.				
	19 But he said this signifying by what death he should glorify the God. And having said this, he says to him, Follow me.				
	20 Peter, turning round, sees the disciple whom Jesus loved following, who also leaned at supper on his breast, and said, Lord, who is it that delivers you up?				
	21 Peter, seeing him, says to Jesus, Lord, and what [of] this [man]				
	22 Jesus says to him, If I wish that he abide until I come, what [is that] to you? You follow me.				
	23 This word therefore went out among the brethren, That disciple does not die. And Jesus did not say to him, He does not die; but, If I wish that he abide until I come, what [is that] to you?				
Christ at this same time appeared in Galilee to 500 as he promised.	1CO 15:6 KJV After that, he was seen of above five hundred brethren at once; of whom the greater part remain unto this present, but some are fallen asleep.				
Christ then leads them over against Bethany into the appointed mountain.	Mat 28:16 But the eleven disciples went into Galilee to the mountain which Jesus had appointed them	28:16- 17		24:50	
	17 And when they saw him, they did homage to him: but some doubted				
	Lk 24:50 And he led them out as far as Bethany, and having lifted up				

199

Comments	Scripture	Matt	Mark	Luke	John
	his hands, he blessed them.				
Jesus in the mountain teaches that the knowledge of the end of the age was in his Father's hand.	ACT 1:6 KJV When they therefore were come together, they asked of him, saying, Lord, wilt thou at this time restore again the kingdom to Israel?  7 And he said unto them, It is not for you to know the times or the seasons, which the Father hath put in his own power.				
BUT he notes all power was given to Him. ["All things that the Father has are mine; therefore I said, that He shall take of mine,and shall show it unto you" (John 16:15).]	<b>10</b>	28:18			
Jesus says they will receive the power of the Spirit. ["Howbeit when he the Spirit of Truth, is come, he will guide you into all truth" (John 16:13).	ACT 1:8a KJV But ye shall receive power, after that the Holy Ghost is come upon you:				

Comments	Scripture	Matt	Mark	Luke	John
He then tells them to preach the gospel to ALL and	Mat 28:19 Go [therefore] and make disciples of all the nations, baptizing them into the name of the Father, and of the Son, and of the Holy Spirit	28:19- 20	16:15		
baptize "them into the NAME of the Father, and of the Son, and of the	20 teaching them to observe all things whatsoever I have enjoined you. And behold, I am with you all the days, until the completion of the age [aeon].				
Holy Spirit."	Mark 16:15 And he said to them, Go into all the world, and preach the good news to all the creation.				
	ACT 1:86 KJV and ye shall be witnesses unto me both in Jerusalem, and in all Judaea, and in Samaria, and unto the uttermost part of the earth.				
Christ further gives them power	Mark 16:16 He that believes and is baptized shall be saved, and he that disbelieves shall be condemned.		16:16 - 18		
	17 And these signs shall follow those that have believed: in my name they shall cast out daemons; they shall speak with new tongues;		10		
	18 they shall take up serpents; and if they should drink any deadly thing it shall not injure them; they shall lay hands upon the infirm, and they shall be well.				
and he said He would be with the Church until the end of the age.	Mat 28:20b And behold, I am with you all the days, until the completion of the age [aeon].	28:20b			
After this commission was	Mark 16:19 The Lord therefore, after he had spoken to them, was taken up into heaven, and sat at the right hand of the God.		16:19	24:51	
given to the apostles by Christ on the mountain,	Lk 24:51 And it came to pass as he was blessing them, he was separated from them and was carried up into heaven.				
He then ascends into heaven.	ACT 1:9 KJV And when he had spoken these things, while they beheld, he was taken up; and a cloud received him out of their sight.				
But lo! two others were there.	ACT 1:10 KJV And while they looked stedfastly toward heaven as he went up, behold, two men stood by them in white apparel;				
	11 Which also said, Ye men of Galilee, why stand ye gazing up into heaven? this same Jesus, which is taken up from you into heaven, shall so come in like manner as ye have seen him go into heaven.				
A list of those on the hill is given.	ACT 1:13 KJV And when they were come in, they went up into an upper room, where abode both Peter, and James, and John, and Andrew, Philip, and Thomas, Bartholomew, and Matthew, James the son of Alphaeus, and Simon Zelotes, and Judas the brother of James.				

Comments	Scripture	Matt	Mark	Luke	John
	14 These all continued with one accord in prayer and supplication, with the women, and Mary the mother of Jesus, and with his brethren.				
The disciples returned to Jerusalem from the appointed mountain.	Lk 24:52 And they, having done him homage, returned to Jerusalem with great joy, ACT 1:12 KJV Then returned they unto Jerusalem from the mount called Olivet, which is from Jerusalem a Sabbath day's journey.			24:52	
The disciples teach in the temple.	Mark 16:20 And they, going forth, preached everywhere, the Lord working with [them] and confirming the word by the signs following upon [it]  Lk 24:53 and were continually in the temple praising and blessing the God.		16:20	24:53	





# **Passover Scriptures**

**cp431»** The chief priests of the Jews had a meeting wherein they took counsel to kill Christ (John 11:47-53; Luke 22:2). Because of those out to kill him, Christ no more could walk openly. (John 11:54)

**cp432»** Now the passover wherein Christ was killed was near, and many had come to Jerusalem for the festival and were wondering among themselves whether Christ would show up at the festival. The chief priests had given direction that if any knew where Christ was that they should point him out to them so the priests could take Jesus. (John 11:55-57)

### 9th of Nisan, a Friday

**cp433**» Then six days before the passover (the 9th of Nisan), Christ came to Bethany which is only a few miles from Jerusalem. (John 12:1; 11:17)

At that time they had a supper wherein Mary anointed the feet of Jesus, and wiped his feet with her hair. (John 12:2-3; Mark 14:3; Matt 26:6-7)

Now some of the disciples had indignation inside their minds at this act, and one named Judas Iscariot, said: "Why was not this ointment sold for three hundred pence, and given to the poor?" (Mark 14:4-5; Matt 26:8-9; John 12:4-6)

Then when Jesus understood what was being said, he spoke saying, "let her alone: that of the day of my burial may she keep it" (John 12:7). The Mary that anointed Christ was Mary Magdalene, who later brought this ointment to Christ's tomb on the day of his resurrection along with some spices she and others had bought and prepared the day before Christ's resurrection (Luke 23:56-24:1; Mark 16:1; Matt 28:1). (John 12:7-8; Mark 14:6-9; Matt 26:10-13)

# 10th of Nisan, a Saturday

cp434» Now right after this supper, right after sunset, thus on the 10th of Nisan, Judas the betrayer of Christ went to the chief priests and said he would help them take Jesus in the absence of a great crowd. Because of this the priests were glad that Judas would betray Christ, and agreed to give him 30 pieces of silver. Further, they consulted if they shouldn't also put Lazarus to death since many of the Jews believed in Jesus because Christ had previously resurrected Lazarus from the dead. (Mark 14:10-11; Matt 26:14-16; Luke 22:3-6; John 12:9-11)

On the next day after Christ came to Bethany, which was the daylight hours of the same 24 hour day that Judas had agreed to betray Christ to the priests, Christ came into Jerusalem — 10th day of Nisan (John 12:12).

Christ rode on an ass into Jerusalem, and the people cried, "Hosanna; Blessed is he that comes in the name of the Lord." This was the 10th day of the Jews 1st month — Nisan. (Mark 11:1-10; Matt 21:1-11; Luke 19:28-40)

Now in the 10th day of Nisan after he entered into Jerusalem, Jesus went into the temple (Mark 11:11).

Then in the evening just before sunset, Christ went into Bethany, a town about two miles from Jerusalem. (Mark 11:11)

### 11th of Nisan, a Sunday

**cp435**» Now in the morrow (the next day, that is the 11th of Nisan), Christ came from Bethany back into Jerusalem. (Mark 11:12-15)

Now it was the 11th, and again Christ goes into the temple in Jerusalem. (Mark 11:15; Luke 19:45; Matt 21:12)

At this time Christ put the money changers out of the temple (Matt 21:12-16; Mark 11:15-18; Luke 19:45-46).

During this time period just before the Passover, Christ was teaching daily in the temple. (Luke 19:47)

Then in the evening of the 11th he went out of Jerusalem again and went into Bethany. (Mark 11:19; Matt 21:17)

### 12th of Nisan, a Monday

**cp436**» After he stayed in Bethany, he came back into Jerusalem on the next day, the 12th. (Mark 11:20; Matt 21:18)

Now when they returned into Jerusalem, the disciples with Christ noticed the tree Christ cursed the previous day (Mark 11:13-14), and how it already had dried up (Mark 11:21; Matt 21:19-20).

At this time on the 12th Christ entered again into the temple (Matt 21:23; Mark 11:27; Luke 20:1).

At this time on the 12th, Christ taught various parables (Matt 21:23-23:39; Mark 11:27-12:44; Luke 20:1-21:4).

Then Christ went out of the temple, and taught his disciples on the mount of Olives about the time of the end of the age (Mark 13:1-33; Luke 21:5-36: Matt 24:1-25:46).

At that time on the 12th of Nisan, Christ noted that after two days would be the feast of unleavened bread, which some call the passover festival (Luke 22:I). (Matt 26:I-2; Mark 14:1)

At this time Christ mentioned that he is betrayed (for on the 10th remember Judas went to the chief priests to betray Jesus) (Matt 26:2).

The chief priests had decided at that time that Christ shouldn't be taken on the feast day (the 15th, Num 28:17), because there might be an uproar among the people. (Matt 26:3-5; Mark 14:1-2)

But remember on the 10th Judas had come to the chief priests, and said he would betray Jesus (John 12:1-11; Luke 22:3-6; Mark 14:3-11; Matt 26:6-16).

After Christ had returned from the temple on the 12th, after he taught many parables (see above), and after he on Mount Olives had spoken of the end of the age that late evening of the 12th (or early on the 13th after sunset), he then stayed on Mount Olives in Bethany (note Luke 24:50 with Acts 1:12). (Luke 21:37)

## 13th of Nisan, a Tuesday

**cp437»** The next day on the 13th, Jesus taught in the temple again after he abode in Bethany the night of the 13th, for at this time Jesus was teaching daily in the temple (Luke 19:47) (Luke 21:38).

Now before the feast of the passover, on the evening of the 13th, after Christ had taught during the daylight of the 13th in the temple, he was again in Bethany, and was eating his supper, as he had been doing each evening since he had began teaching in the temple on the 10th (John 13:1).

The home he was staying in was that of Mary Magdalene, Martha, and Lazarus (John 12:1).

Now Jesus on the 13th had instructed the apostles to get a room and make it ready for the passover meal, which was to occur on the 14th (Matt 26:17-19; Mark 14:12-16; Luke 22:7-13).

cp438» [[Let's correct a few verses that were mistranslated in many English translations of the Bible. These corrections were made by a Greek text. Matt 26:17 should read: "now towards the first [day] of unleavened [bread] approaches the disciples to Jesus ..." And Mark 14:12 should read: "and towards the first day of the unleavened [bread], when they kill the passover, his disciples say to him...." And Luke 22:7 should read: "now it came towards the day of unleavened [bread], in which was needful to be killed the passover." Therefore what these verses are saying is that towards or near the 14th day when the passover was to be killed, the disciples had asked Christ where they would eat the passover the next day. Now in Matthew 26:19, Mark 14:16, and Luke 22:13 the Greek verbal word translated "they made ready" is an aorist word that indicates an action without indicating the time of the action. Thus, it can mean action in the past, present, or future. According to the context of this verse this Greek word should have been rendered in the following manner: "were to make ready" the passover in the certain house where Christ said to prepare it. Christ had ordered them to

prepare for the passover, but the events surrounding Christ's betrayal made it impossible to go and eat the passover.]]

- **cp439**» Now the evening of the 13th came and Christ was in Bethany at supper with his disciples. "And supper taking place..." (John 13:2; Matt 26: 20-21; Mark 14:17-18; Luke 22:14).
- cp440» Christ time after time taught the disciples that the greatest thing was to serve others (Luke 9:46-48; Mark 10:42-44). And again on the evening of the 13th he again by using the example of washing their feet, said that the greatest thing was to serve, not to lord over others. "It is more blessed to give then to receive" (Acts 20:35). The washing of the feet was a reiteration of the principle of giving and serving. We try our best to follow this principle always, not just on one day of the year.
- **cp441»** Now during this meal Jesus broke the bread, and passed it around, and said he could "not eat it," the passover, with them until it was fulfilled in the kingdom of God. (Luke 22:15-20; Mark 14:22-24; Matt 26:26-29)
- **cp442»** And during this meal, Christ revealed who would deliver him up that night (14th, after sunset; after the supper they were eating on the 13th before sunset). (Matt 26:21-25; Mark 14:18-21; Luke 22:21-23; John 13:21-29)

### 14th of Nisan, a Wednesday

cp443»

- (1) It was Judas Iscariot, and right after he took the piece of bread, which pointed him out as the betrayer (yet the apostles didn't understand), Judas immediately went out, "and it was night." That is, right after sunset Judas went out to bring the chief priests to take Jesus. (John 13:30) They were in Bethany, which is on the side of Mount Olives, when they were eating this meal (see above).
- (2) After they sang a hymn, they went onto Mount Olives, and brought two swords with them so scripture could be fulfilled (Mark 14:26; Matt 26:30; Luke 22:35-39).
- (3) On Mount Olives Christ speaks of various matters to the apostles. (The scripture is vague as to whether these things were spoke still in the house in Bethany, or near the house, or somewhere on the mount of Olives.) (Mark 14:26-31; Matt 26:31-35; John 13:31-17:36)
- **(4)** At Gethsemane (probably on the mount of Olives) he enters into a garden to pray. (Matt 26:36-46; Mark 14:32-42; Luke 22:40-46; John 18:1)
- (5) Now Judas knew where this garden was, for Jesus came often to it to pray (John 18:2).
- (6) It was in this garden that Judas came with the chief priests and Pharisees, who came with lanterns and torches because it was at night on the 14th after sunset (John 18:3; Luke 22:47; Mark 14:43; Matt 26:47).

- (7) At this time Judas revealed Christ by greeting him with a kiss. Peter cut off an ear of a guard, but Christ healed the ear. Then *all* the disciples "forsook him, and fled." (Matt 26:47-56; Mark 14:43-52; Luke 22:47-53; John 18:4-11)
- (8) Then the band of men with the chief priests bound Christ and brought him, and let him away to Annas *first*, for he was the father-in-law to Caiaphas, who was the high priest that same year (John 18:12-13).
  - (9) Then they took Christ to Caiaphas the high priest (John 18:24).
- (10) During that time Peter denied Christ three times as Jesus foretold (John 18:15-27; Luke 22:54-65; Mark 14:66-72; Matt 26:69-75).

[[Now early [day] was come" (Matt 27:I). Or, "and real early [in the 24 hour day or in the day light], the chief priests" (Mark 15:1). Or, "and as it was day, the elders of the people and the chief priests" (Luke 22:66). Or, "and it was early [in the 24 hour day]; and they themselves went not into the judgment hall" (John 18:28). These verses were corrected from the Greek text. It was early in the day, that is, sometime in the first 12 hours of the 14th of Nisan (CP 4 of the *Chronology Papers* for more information about "morning," "evening," "early" etc.). It probably was the early part of the day *light* time.]]

- (11) In this early part of the 24 hour day, the chief priests and the elders came to take Christ, and right after they had him briefly before the high priest, they brought him to the judgement hall to Pilate (John 18:28-29; Luke 22:66-71; 23:1; Mark 15:1; Matt 27:1-2). Pilate sent Jesus to Herod Antipas because "he knew that he was of Herod's jurisdiction" (Luke 23:6-7). But Herod after mocking Jesus sent him back to Pilate (Luke 23:8-12).
- (12) Then Jesus was tried and sent to be crucified (John 18:29-19:16; Luke 23:2-25; Mark 15:2-20; Matt 27:2-31).
- (13) Now during that 24 hour day Judas the Betrayer killed himself (Matt 27:3-10; Acts 1:16-20).
  - (14) Then they crucified Christ. (Matt 27:32-56; Mark 15:21-41; Luke 23:26-49; John 19:16-37)
- (15) Now the Passover was prepared and killed on the 14th of Nisan, and also the 14th was a day to prepare for the 15th, which was an annual Sabbath wherein no work was to be done. Thus, because of a law that a body could not hang or remain on a tree (stake or wood cross) during the night, but must be taken down the very same day (Deut 21:23; cf Josh 8:29; 10:26-27). "The Jews therefore ... besought Pilate ... that he might be taken away." (John 19:31)
- (16) Therefore Christ was quickly buried just before sunset, just before the annual Sabbath of the 15th. (John 19:40-42; Luke 23:53-55; Mark 15:42; Matt 27:57-61)

(17) Right after the burial "they returned" to their houses (Luke 23:56, 1st part of verse).

### 15th of Nisan, a Thursday

**cp444»** This was day of the annual Sabbath, a "high day" or festival Sabbath for Jews (John 19:31; Mark 15:42; Luke 23:54).

### 16th of Nisan, a Friday

cp445» After this one annual Sabbath (the 15th) some women bought spices, and they prepared these spices and the ointments that Mary Magdalene had saved (John 12:7). (Mark 16:1; Luke 23:56, middle part of verse)

### 17th of Nisan, a Saturday

cp446» Now late on the SabbathS [of that week] they came to the tomb of Christ with the Spices (Matt 28:1 with corrected translation from the Greek text). Note: It should read "SabbathS" in this verse. The last day of the week is the Sabbath. But in this week there were two Sabbaths because the 15th, on a Thursday that year, was an annual Sabbath. Therefore they came to the tomb *late* on the second Sabbath.

Jesus was then resurrected on the last of the evening, just before or at sunset, on the second Sabbath. He laid in the tomb from late Wednesday evening to late Saturday evening, exactly three days and three nights as he said he would in Matthew 12:38-40, Matthew 27:63, and Mark 9:31. (Matt 28:2)

#### **End Note for CP4**

#### **Darkness or Daylight or Twilight**

cp447» E.W. Bullinger in his, *Figures of Speech used in the Bible*, writes about the Hebrew word *nesheph* (Strong's # 5399), which he classifies as a homonym. He speaks of the translators having problems with the Hebrew *nesheph*. Because they do not see "the *Homonym*, the renderings are confused, and the difficulties are evaded by the rendering *twilight*" (p.1010). Bullinger calls the Hebrew word a homonym and says it means either **darkness** or **daylight**. Strong in his *Hebrew and Chaldee Dictionary* says it literally means *breeze* or by implication *dusk* (when the evening breeze prevails) or dark, dawning of the day (morning), or night or twilight. In Proverbs 7:9 it reads in the King James Version, "in the twilight [*nesheph*], in the evening, in the black and dark night." Job 3:9 speaks of "the stars of the twilight [*nesheph*]" contrasting this with "the dawning of the day" or more literally "the eyelids of the dawn."

Bullinger names three verses where he thinks *nesheph* means daylight, Job 7:4, 1 Sam 30:17 and Psalms 119:147. Both 1 Samuel 30:17 and Psalms 119:147 can easily be rendered as dusk or evening. Thus David in 1 Samuel "smote them from evening [nesheph] to evening" or "darkness [nesheph] to evening," and in Psalms 119:147 it could easily be rendered "I go before the dusk [nesheph] and cry," or "I go before the darkness and cry." And Job 7:4 is easy once you understand that evening is the latter part of the day (24 hour day or daylight) "When I lay down, I say, When shall I arise, and the evening ['ereb, # 6153] be gone? And I am full of tossings to and fro unto the nesheph." Nesheph being the time the breeze comes or the cooling comes to the day, that is, the time near or after the sunset. It is also the start of a new-day, that is, a new 24 hour day. Thus Job lays down and waits for a new-day, a new time when things will be better. This translation is confusing only because the translators do not understand or appreciate that the Hebrews' 24 hour day began at sunset when the cooling of the day or the breeze of the day occurred. In conclusion the Hebrew nesheph is not a homonym, but a word that means literally breeze, and by implication the time near or after sunset when the earth cools. But because the translators live in a time when the new 24 hour day begins for most at 12 midnight, they have a mindset that does not allow them to understand the beginning and end of the day for the Hebrews. This confusion also carries over to the New Testament. Thus the confusion about the time of Christ's resurrection.

# Index

1000 years difference
identification game
14th of Nisan
30 years old
37 year captivity
37th year
568-567 BC CP 3:27   Pg 10
46 years, temple
568-567 BC
37th year CP 3:27   Pg 10
77 years of missing evidence
7th year
523-522 BC CP 3:28   Pg 10
Abram
absolute dates
Thiele
accessional counting
Accessional years system  Judah's
Judah's
Adam CP 3:1   Pg 8
Albright, William F
angels, two
two men
ascension, Christ's
astronomical calculations
chronology
astronomical chaos
astronomical data
observed or calculated
astronomical identification game
Astronomically fixed chronology

Egyptian?		CP 2:12   Pg 30
Atomic clocks		CP 1:5   Pg 11
Babylonian calenda	ar	. CP 3:32   Pg 113
baptism		
Christ's		CP 4:1   Pg 126
Before Adam		CP 1:2   Pg 8
biblical dates		
Christian I	Era	CP 3:13   Pg 94
oirth		
Christ's		CP 4:1   Pg 126
Budge, E.A.		
Egyptian k	kings	CP 2:8   Pg 26
Caesar Augustus		. CP 4:15   Pg 140
calculations v. obse	ervations	CP 2:35   Pg 53
calendar		
Babylonia	n	. CP 3:32   Pg 113
postponem	nents, Jewish	CP 3:17   Pg 98
Cambyses		
7th year .		. CP 3:28   Pg 109
cannibalism		. CP 4:39   Pg 164
cardinal number		. CP 3:23   Pg 104
catastrophic-astrono	omical events	CP 2:38   Pg 56
Censorinus		. CP 4:20   Pg 145
chaos		
magnetic p	poles reversal	. CP 3:38   Pg 119
Moon's sur	rface	. CP 3:37   Pg 118
Sun, Moor	n, Earth	. CP 3:37   Pg 118
chaos, astronomical	1	. CP 3:34   Pg 115
Christ		
length of l	ife	. CP 4:19   Pg 144
· ·		
	death	. 3
Christ's birth		1 3 1 1

day			
	Jews'		CP 4:28   Pg 153
daylight .			CP 4:64   Pg 189
death			
	Christ's	·,	CP 4:1   Pg 126
death, Ch	rist's		
İ	nelps identify his ti	me	CP 4:22   Pg 147
decay rat	es, constant		
1	no proof		. CP 1:4   Pg 10
Dionysiu	s Exiguus		CP 4:2   Pg 127
Dionysiu	s' and Jewish system	n	CP 2:60   Pg 78
earth is o	ld theory		CP 1:2   Pg 8
earth is y	oung system		CP 1:11   Pg 17
earthquak	es		CP 3:37   Pg 118
eclinse			
;	suppression of		CP 2:37   Pg 55
;	annular		CP 2:27   Pg 45
;	average time betwe	en	CP 2:29   Pg 47
	frequency		CP 2:24   Pg 42
	ntervals, and		CP 2:25   Pg 43
	Lunar		CP 3:31   Pg 112
	observable or not .		CP 2:28   Pg 46
j	partial and total		CP 2:27   Pg 45
j	penumbra and umb	ra	CP 2:27   Pg 45
	series		CP 2:26   Pg 44
,	ypes of		CP 2:27   Pg 45
ecliptical	records		
	vagueness		CP 2:23   Pg 41
economic	texts		
	uggling of	1	CP 2:51   Pg 69
Egyptian	Chronology		
	cing lists, and		. CP 2:8   Pg 26
England			

kingdoms of	·	CP 3:9   Pg 90
Israel's non-accessions	al year	CP 3:9   Pg 90
Jehoiachin		
37 year capti	ivity	. CP 3:12   Pg 93
Jeremiah's 23 years	<i>C</i>	. CP 3:12   Pg 93
Jews' day		CP 4:28   Pg 153
Jubilee year		. CP 3:12   Pg 93
Judah and Israel		
kingdoms of	`	CP 3:9   Pg 90
Judges, book of		CP 3:6   Pg 87
juggling of economic	texts	. CP 2:51   Pg 69
King List(s)		CP 2:6   Pg 24
king lists		
Egyptian	Ŏ P	CP 2:8   Pg 26
eponym lists		CP 2:6   Pg 24
kingdoms		
Israel and Ju-	dah	CP 3:9   Pg 90
kings names	2 2	
different		CP 3:39   Pg 120
kings' names		. CP 2:11   Pg 29
light or dawn		CD 4:37   Da 162
Lunar eclipses	21 2	CP 3:31   Pg 112
magnetic poles		CP 3:38   Pg 119
Manetho		. CP 2:11   Pg 29
Manetho's king list		CP 2:8   Pg 26
Mars and Moon		
rocks from fo	ound in Antarctica?	CP 3:37   Pg 118
month names		
Christians k	now	CP 3:21   Pg 102
by number .		CP 3:21   Pg 102
Moon		
rocks found	from in Antarctica?	CP 3:37   Pg 118
morning and evening		CP 4:28   Pg 153
mountains lifted up a	and down	CP 3:37   Pg 118

Nabonidus
18th year
his mother's memorial tablet
names
kings'
names, different
kings
Nebuchadnezzar
37th year CP 3:27   Pg 108
Nisan, 14th
non-accessional counting
numbers
cardinal, ordinal
observation v. calculation
Observational New Moons
versus Calculated New Moons
Olympiads
Era of CP 2:61   Pg 79
Omri's house
42 years CP 3:12   Pg 93
42 years       CP 3:12   Pg 93         ordinal number       CP 3:23   Pg 104
Paschal dates
Dionysius
Passover Scriptures
patriarchal years
penumbra eclipses
planet patterns
planet positions
planets' orbits
repeat themselves
Plato
chaos of heavenly bodies
polyphonous
Ptolemaic Canon

Ptolemy	CP 4:20   Pg 145
Ptolemy and chronology	CP 2:46   Pg 64
Pul	CP 3:41   Pg 122
Pul and Tiglath-Pileser	CP 3:41   Pg 122
Quirinius	
Cyrenius	CP 4:15   Pg 140
radioactive dating method	CP 1:3   Pg 9
radiohalos	CP 1:5   Pg 11
reign	
``began to reign"	CP 3:42   Pg 123
reigns	
artificially longer	CP 3:43   Pg 124
resurrection, time of	
rising of the sun	CP 4:38   Pg 163
rocks	
Moon and Mars, from	CP 3:37   Pg 118
Roman history	CP 2:61   Pg 79
Rome, foundation of	
Rome, foundation of  Era of	CP 2:61   Pg 79
Sabbath	
Sabbath late on	CP 4:35   Pg 160
Saros Tablet	
ecliptic interval	CP 2:25   Pg 43
scriptures	
death, resurrection	CP 4:30   Pg 155
secular chronology	
contradicts bible	CP 2:3   Pg 21
secular dates	
626BC-75AD	CP 2:40   Pg 58
Seleucid years	CP 4:18   Pg 143
Olympiads	
Sheaf of First Fruits	
Fulfillment of	CP 4:42   Pg 167
Solomon	CP 3:6   Pa 87

 Jubilee
 CP 3:12 | Pg 93

 non-accessional
 CP 3:9 | Pg 90

years

	23, Jeremiah	. CP 3:12   Pg 93
	37 year captivity, Jehoiachin	. CP 3:12   Pg 93
	42	. CP 3:12   Pg 93
	count of	CP 3:6   Pg 87
	fall to fall	CP 3:9   Pg 90
	patriarchal years	CP 3:1   Pg 82
	regnal and accessional	CP 3:6   Pg 87
	Seleucid, Olympiads	CP 4:18   Pg 143
zero yea	ar, no	
	astronomical dating	CP 2:62 LPa 80





# Table of Contents, Expanded Version

Chrono	logy Papers
	CP: Table of Contents
	CP1: Biblical Chronology
	Chronology of Mankind and Its Quandary CP 1:1   Pg 7
	Two Views of History
	Earth is Old Theory
	Foundations for the "Earth Is Old System"
	Theory of Evolution
	Radioactive Dating Methods CP 1:3   Pg 9
	Constant Decay Rates? CP 1:4   Pg 10
	Decay Rates not Constant; Atomic Clocks not Constant CP 1:5   Pg 11
	Radiohalos CP 1:5   Pg 11
	Dubious Premises
	Different Methods of Dating Don't Agree CP 1:6   Pg 12
	Great Age and Distances in Space Based on the Redshift Method CP 1:7   Pg 13
	Redshift "Foundation" CP 1:7   Pg 13
	Who is Halton Arp? CP 1:10   Pg 16
	Foundations for the "Earth is Young System"
	CP2: Secular Chronology
	Secular Chronology Before 626 BC is Dubious
	Overview of This Section
	Contradicts Bible (1)
	King Lists (2)
	Astronomical Calculation (3)
	1: Contradicts the Bible
	Edwin R. Thiele
	Some of the things wrong with Thiele's chronology are as follows:
	CP 2:3   Pg 21
	2: Reconstructed Eponym List(s) and King List(s) CP 2:6   Pg 24
	Some quotes from these latter sources: CP 2:6   Pg 24
	Eponym List(s)
	King List(s) CP 2:7   Pg 25
	Egyptian Chronology and King Lists

Egyptian Kings' Multiple Names	CP 2:11   Pg 29
Egyptian Dates Astronomically Fixed?	CP 2:12   Pg 30
Egyptian King Lists: Conclusion	CP 2:13   Pg 31
Sumerian Chronology And Hammurabi	CP 2:14   Pg 32
Hammurabi	CP 2:14   Pg 32
Sumerian King List	CP 2:17   Pg 35
3: Astronomical Calculations	CP 2:19   Pg 37
In Thiele's own words	CP 2:20   Pg 38
All About Eclipses	CP 2:23   Pg 41
Vagueness of Ecliptical Records	CP 2:23   Pg 41
Frequency of Eclipses	CP 2:24   Pg 42
Saros versus Ecliptic Interval	CP 2:25   Pg 43
Series of Eclipses	CP 2:26   Pg 44
Types of Eclipses	CP 2:27   Pg 45
Annular Eclipses	CP 2:27   Pg 45
Partial and Total Eclipse	CP 2:27   Pg 45
Penumbral v. Umbral Eclipses	CP 2:27   Pg 45
Observable Eclipses	CP 2:28   Pg 46
'Average' Time Between Eclipses	CP 2:29   Pg 47
Identification Game	CP 2:31   Pg 49
1000 Years Difference	CP 2:34   Pg 52
Calculations versus Observations	CP 2:35   Pg 53
Identification Game, More on the	CP 2:35   Pg 53
Suppression of an Eclipse	CP 2:37   Pg 55
In Conclusion	CP 2:38   Pg 56
Catastrophic-Astronomical Events	CP 2:38   Pg 56
Review of Secular Chronology Before 626 BC	CP 2:39   Pg 57
Secular Dates from 626 BC to 75 AD	CP 2:40   Pg 58
1: Ptolemaic Canon	CP 2:42   Pg 60
The Ptolemaic Canon	CP 2:42   Pg 60
Ptolemy's Fraud	CP 2:43   Pg 61
Ptolemy and Chronology	CP 2:46   Pg 64
No Babylon Calendar Dates	CP 2:47   Pg 65
Calculations Does Not Authenticate King's List	CP 2:48   Pg 66
Ptolemy's Eclipses: Calculated not Observed	CP 2:49   Pg 67
Newton v. Thiele	CP 2:50 LPa 68

2: Juggling of Economic Texts	CP 2:51   Pg 69
3: Reading Dates into Clay Tablets	CP 2:52   Pg 70
4: 77 Years of Missing Evidence	CP 2:54   Pg 72
Persian Chronology Dubious	CP 2:55   Pg 73
I do not know the chronology of this period of the Persian empir	e because
······································	CP 2:55   Pg 73
Absolute Dates and Edwin R. Thiele	CP 2:56   Pg 74
Nabonidus' 18th Year	CP 2:57   Pg 75
Nabonidus' Mother's Memorial Tablet	CP 2:58   Pg 76
Secular Chronology: Other Problems	CP 2:60   Pg 78
Cuneiform Tablets: Excavation and Publication	CP 2:60   Pg 78
Roman Historical Gaps	CP 2:61   Pg 79
Era of the Olympiads Rarely Used	CP 2:61   Pg 79
Era of the Foundation of Rome	CP 2:61   Pg 79
Public Documents in England	CP 2:62   Pg 80
No Zero Year: Historical v. Astronomical Dating	CP 2:62   Pg 80
Observed or Calculated Data?	CP 2:62   Pg 80
CP3: Methods, Chronology, Calendars, Absolute Dates, Chaos, and other Detai	
(1) Patriarchal-Year Method of Counting Years	
Method used from Creation to Abram	. •
% <u>9</u>	. CP 3:3   Pg 84
First Day of New Year is Important: Similar to Accession	•
Long-Lives of Patriarchs; Radiation, Flood, Water	
From Abraham's 70 <sup>th</sup> year we count 430 years inclusive	. •
Exodus	
Inclusive Count of 480 years: Method From the Exodus to Solor	non
From the Exodus we count 480 years <u>inclusively</u> to the Solomon's reign by using the verse, 1 Kings 6:1	l
	. CP 3:6   Pg 87
Book of Judges	. CP 3:6   Pg 87
(3) Comparing reigns of Judah v. Israel Kings: Method from Solomon The Kingdoms	
Method of Counting of Regnal Years	. CP 3:6   Pg 87
Regnal Years and Accessional Year Method	. CP 3:6   Pg 87
Confirmation of Judah's Regnal Year	. CP 3:7   Pg 88

Comparing the Different Regnal Systems from Solomon Through the Kingdoms	
Regnal Years Started at Different Times CP 3	:9   Pg 90
Judah's Accessional Year System CP 3	:9   Pg 90
Israel's Non-Accessional Year System CP 3	:9   Pg 90
Interregnal years	10   Pg 91
Co-Reigns	10   Pg 91
Changes From One Regnal System to Another CP 3:	10   Pg 91
Verification of Chronological Periods CP 3:	12   Pg 93
Connection to Christian Era System CP 3:	13   Pg 94
Connecting Christian Era System to Biblical Dates	13   Pg 94
Not A.M. Method	13   Pg 94
Review of Methods of the Chronology CP 3:	14   Pg 95
1-2078 YM CP 3:	14   Pg 95
2078-2507 YM	14   Pg 95
2507-2986 YM CP 3:	14   Pg 95
2546- 3281 YM	14   Pg 95
3365 - 3387 YM CP 3:	14   Pg 95
2986 - 3423 ½ YM CP 3:	15   Pg 96
3423 ½ - 3424 ½ YM = 568-567 BC	15   Pg 96
3423 ½ YM until Today	15   Pg 96
Possible Problem Time Periods of the Chronology CP 3:	15   Pg 96
Hebrew Calendar CP 3:	16   Pg 97
Observation and Calculation CP 3:	16   Pg 97
Waning Moon Method CP 3:	16   Pg 97
Postponements of Holy Days	17   Pg 98
Difference Between Astronomical, Golden Number's, and Observational New N	
CP 3:	18   Pg 99
Difference Between Observational New Moons and Calculated New Moons  CP 3:	18   Pa 99
First Month	
New Year's Day	. •
Civil Years and the Religious Calendar	
Names of Months	· -
Significance of the New Year's Day	
Cardinal v. Ordinal Numbers CP 3:23	. •
Absolute Dates CP 3:23	

Economic Cuneiform Tablets	CP 3:23	Pg 104
Connection Between Biblical and BC-AD Dates	CP 3:24	Pg 105
From the End of Judah's Kingdom	CP 3:24	Pg 105
Secular Evidence Used	CP 3:24	Pg 105
Two Clay Tablets	CP 3:25	Pg 106
Clay Tablet # 1: Tablet VAT 4956	CP 3:27	Pg 108
37th Year, 568-567 BC	CP 3:27	Pg 108
Names of Kings in Clay Tablets	CP 3:28	Pg 109
Clay Tablet # 2	CP 3:28	Pg 109
7th Year, 523-522 BC	CP 3:28	Pg 109
Identification Process	CP 3:29	Pg 110
Software and Books	CP 3:29	Pg 110
Findings of Study	CP 3:29	Pg 110
Planets' Orbits Repeat	CP 3:30	Pg 111
Synodic Periods	CP 3:30	Pg 111
King Lists	CP 3:30	Pg 111
Tablet Contents & King Lists	CP 3:31	Pg 112
Lunar Eclipses	CP 3:31	Pg 112
Planet Positions	CP 3:31	Pg 112
Babylonian Calendar	CP 3:32	Pg 113
Other Planet Conjunction Patterns	CP 3:32	Pg 113
Astronomical Chaos	CP 3:34	Pg 115
Gods, Stars and Chaos	CP 3:34	Pg 115
Israel's God did All: Good and Bad	CP 3:36	Pg 117
Examples of Past Chaos	CP 3:37	Pg 118
Brimstone and/or hailstones and fire from heaven	CP 3:37	Pg 118
Great earthquakes	CP 3:37	Pg 118
Sun, Moon, and Earth in chaos	CP 3:37	Pg 118
Mountains and valleys lifted up and down	CP 3:37	Pg 118
The Flood and collapse of the waters above the earth	CP 3:37	Pg 118
Rocks	CP 3:37	Pg 118
Moon's Craterous Face	CP 3:37	Pg 118
Rocks from Moon and Mars	CP 3:37	Pg 118
Reversal of the Magnetic Poles	CP 3:38	Pg 119
Other Important Information	CP 3:39	Pg 120
Names: Kings Who Had More Than One Name	CP 3:39	Pg 120

	Different Kings With The Same Name	JP 3:39	Pg 120
	Same Language Sign, Different Sounds; Different Sounds, Same Langu		
	Pul and Tiglath-Pileser	•	•
	Non-Accessional v. Accessional System of Counting	•	
	"Began to Reign"		_
	Mistakes in Other Chronologies	•	_
	Chaos	•	
	Co-reigns	CP 3:43	Pg 124
	Dating Methods Differ	CP 3:43	Pg 124
	Artificially Longer Reigns	CP 3:43	Pg 124
	Non-Contemporary Evidence	CP 3:44	Pg 125
	Different Meaning of the Hebrew Ben	CP 3:44	Pg 125
CP4: C	Chronology and Christ	CP 4:1	Pg 129
	Methods for Finding Christ's Birth, Baptism, and Death	CP 4:1	Pg 126
	Christian Era	CP 4:1	Pg 126
	Dionysius Exiguus	CP 4:2	Pg 127
	We cannot confirm these traditional dates	CP 4:3	Pg 128
	What System did Dionysius Introduce?	CP 4:3	Pg 128
	Vague Beginning of Dionysius' Cycle	CP 4:4	Pg 129
	System Dated from the Death of Christ?	•	_
	March 25th	•	_
	Paschal Cycle	CP 4:8	Pg 133
	What was Meant by "Incarnation"?		_
	March 25 <sup>th</sup> : Incarnation & Passion Date		
	To Review	•	
	When was Christ Born?	CP 4:10	Pg 135
	A.U.C. Date	CP 4:11	Pg 136
	Diverse Dating Methods and Assumptions		_
	To Review	•	
	Christ's Birth		
	Dionysius' Date		_
	Eclipse: Days of Herod		_
	Rule of Caesar Augustus	•	
	Governor Cyrenius/Quirinius	•	_
	Fall Birth Date	CP 4:16	Pg 141

	Star	CP 4:16   Pg 141
Baptism	n & Death	CP 4:17   Pg 142
	Tiberius' 15th Year	CP 4:17   Pg 142
	30 Years Old	CP 4:17   Pg 142
	46 Years of the Temple	CP 4:18   Pg 143
	Olympiads & Seleucid Years	CP 4:18   Pg 143
	Length of Life	CP 4:19   Pg 144
	To Review	CP 4:19   Pg 144
	Difficulty of Connecting the Christian Era With Other Systems	CP 4:20   Pg 145
	Connection Between Christ's Time and Other Systems	CP 4:20   Pg 145
	Eusebius' Influence	CP 4:21   Pg 146
Christ's	Time Identified Through His Death	CP 4:22   Pg 147
	Absurd Ages of Biblical Characters	CP 4:22   Pg 147
	If contemporary dates are correct, then the ages of Ez	
	and the priests are absurd	
	Summary	
	Christ died on April 16, 10 AD?	• •
	If Christ's birth	
Three D	Days and Three Nights	· -
	Jews' Day Started After Sunset	• •
	Our "Morning," "Evening," and "Dawn"	
	Jews' "Morning," "Evening," and "Dawn"	· -
	Some Reasons for the Confusion	CP 4:29   Pg 154
	Counting Days	CP 4:29   Pg 154
	More Than 36 Hours	CP 4:30   Pg 155
	Death and Resurrection, Scriptures	CP 4:30   Pg 155
	(A) Time and Day Buried	CP 4:31   Pg 156
	Review of "(A) Time and Day Buried"	CP 4:32   Pg 157
	(B) Length of Time Buried	CP 4:32   Pg 157
	Correct Translations	CP 4:34   Pg 159
	Late or After the Sabbath?	CP 4:35   Pg 160
	Dawn or Light	CP 4:37   Pg 162
	Women Buy Spices: When?	CP 4:37   Pg 162
	Time of Resurrection By The Angel	CP 4:38   Pg 163
	Rising of The Sun	CP 4:38   Pg 163
	Christ's Ascension	CP 4:40   Pa 165

Two Men; Two Angels?	CP 4:40   Pg 165
Ascension & Fulfillment of Sheaf of the First Fruits	CP 4:42   Pg 167
Collation of Scriptures Pertaining to Christ's Burial and Resurrection	CP 4:44   Pg 169
Passover Scriptures	CP 4:59   Pg 184
9th of Nisan, a Friday	CP 4:59   Pg 184
10th of Nisan, a Saturday	CP 4:59   Pg 184
11th of Nisan, a Sunday	CP 4:60   Pg 185
12th of Nisan, a Monday	CP 4:60   Pg 185
13th of Nisan, a Tuesday	CP 4:61   Pg 186
14th of Nisan, a Wednesday	CP 4:62   Pg 187
15th of Nisan, a Thursday	CP 4:64   Pg 189
16th of Nisan, a Friday	CP 4:64   Pg 189
17th of Nisan, a Saturday	CP 4:64   Pg 189
End Note for CP4	CP 4:64   Pg 189
Darkness or Daylight or Twilight	CP 4:64   Pg 189



- 1. Sabbaths
- 2. Sabbaths
- 3. Sabbaths
- 4. Sabbaths or week
- 5. Lit. Sabbaths
- 6. Notice, Christ does not deny that he is God.